CITY OF CATHEDRAL CITY

COMPREHENSIVE GENERAL PLAN

Cathedral City

Prepared for

City of Cathedral City
68-700 Avenida Lalo Guerrero
Cathedral City, CA 92234

Prepared by
Terra Nova Planning & Research, Inc.
400 South Farrell, Suite B-205
Palm Springs, CA 92262

Adopted July 31, 2002

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CITY OF CATHEDRAL CITY

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CHAPTER I

INTRODUCTION TO THE GENERAL PLAN

INTRODUCTION

The City of Cathedral City General Plan has been prepared in compliance with California law, which requires that all cities and counties adopt a General Plan. The General Plan is the primary land use tool use by the City in assisting in the development and redevelopment of the City. This General Plan includes the goals, policies and programs which the City will utilize in making land use decisions in the future. In addition, each Element includes diagrams, historic and current data and information, and projections for the future.

BACKGROUND

The City of Cathedral City is located in the Coachella Valley, in eastern Riverside County. The City is bordered on the west by the City of Palm Springs, and on the east by the City of Rancho Mirage. The City currently includes 19.5 square miles of land, extending from the Santa Rosa Mountains on the south, to Edom Hill on the north. This General Plan addresses not only the 12,502 acres located within the City limits, but also the 3,267 acres of the City's Sphere of Influence. These lands are located north of Interstate 10.

Public Participation

The General Plan was developed through a series of public meetings over a period of several years. This public participation process culminated in several public workshops held by the Planning Commission and City Council, meeting jointly, in 2001 and 2002. The input provided by residents at these meetings was incorporated into the General. Following the required public comment period, public hearings were held by both the Planning Commission and City Council, to receive further input from the public on the contents of this document.

General Plan Format

The City of Cathedral City General Plan includes two documents: This General Plan and the General Plan Environmental Impact Report. These documents together are the framework for land use decisions in the City, including residential density, commercial and industrial intensity, and open space and park areas. The General Plan includes summaries of background information which is provided in greater detail in the Environmental Impact Report.

Each Element includes one or more goals, and the policies and programs necessary to reach that goal. The goal is the most general statement in the policy-making process. The policies provide decision-makers with direction as they consider development in the City. Finally, the programs provide implementation mechanisms for the policies, including funding priorities, major development standards, and staffing responsibilities. The programs also include mechanisms to allow the City to respond to changes in market and environmental conditions as time passes.

The General Plan also includes maps and graphics which illustrate and support policies and programs, and as such are integral to the General Plan document.

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CHAPTER II

ADMINISTRATION AND IMPLEMENTATION

This chapter of the General Plan addresses the administration of the General Plan. Key discussions in this element include the format and content of the General Plan, the various chapters and elements, determining consistency with the General Plan, amending the General Plan, and other means of implementing the Plan. Other components and aspects of the General Plan are also discussed in the Administration and Implementation Element, including environmental resource and hazard maps, design concepts and procedural matters.

ADMINISTRATION ELEMENT

PURPOSE

The purpose of the Administration Element is to provide direction and guidance in implementing the Comprehensive General Plan. This element also serves as background on the information set forth in the General Plan, its organization, the Plan's function and its relationship to other regulatory documents, including the California Environmental Quality Act (CEQA), the Subdivision Map Act, and the City Zoning Ordinance. General Plan review and amendment procedures are also described in the Administration Element. It describes the various means by which the General Plan is implemented, including Element-specific implementation strategies, incorporated throughout the General Plan. This element also sets forth a goal, policies and programs intended to effectively administer the General Plan.

BACKGROUND

The Administration Element facilitates the review and regulation of land use and development on public and private lands. It also provides the framework by which the appropriateness of municipal actions are determined, including a review of applicable policies and standards for consistency with the General Plan. California Government Code (Section 65300) requires incorporated communities and counties to prepare and adopt a comprehensive, long-term General Plan. The General Plan regulates the physical development of lands under the jurisdiction of, or having an influence upon, the community, including the City's legally recognized Sphere-of-Influence. The General Plan and its various elements are required to function as an integrated, internally consistent and compatible statement of policies (Government Code Section 65300.5).

Conditions and circumstances unique to the community must also be accommodated and therefore the General Plan may take different forms, while meeting its minimum requirements (Government Code Section 65300.7). A General Plan must be designed to be responsive to the variations in community size and density, fiscal and administrative capabilities, land use and development issues, and the needs of each community's residents (Government Code Sections 65300.9, 65302). The Administration Element provides for the periodic review and amendment of the General Plan, establishing formal procedures to ensure that the Plan is maintained and kept current with changing conditions, and that it continues to reflect the goals of the community.

General Plan Organization and Format

The Cathedral City General Plan is organized into five major chapters: Administration, Community Development and Design, Municipal Facilities and Services, Environmental Resources and Environmental Hazards. Grouped within each chapter are the various related

General Plan Elements, providing background information and related issues, goals and specific policies.

The General Plan is a policy document supported by the associated Program Environmental Impact Report (EIR). Together, these documents provide detailed information on the City and its aspects. The Cathedral City General Plan is implemented by policies and programs set forth in each element, reflecting the character, vision and aspirations of the community.

Goals, Policies and Programs
The goals of each element of the General Plan are broad statements reflecting the City's values, character, aims and aspirations. They address the quality of life issues important to the community, and the current and planned physical development of the City. The General Plan goals also address the preservation of important environmental and cultural assets of the community.

The purpose of policies is to further the goals of the General Plan and establish specific performance requirements for each element. Programs accompanying the policies provide quantitative and qualitative targets, cite agencies most likely to carry out the program, and propose schedules for program implementation and review.

Exhibits, Maps and Graphics
The General Plan, and its supporting documentation provides official exhibits, maps and graphics to describe physical conditions, delineate land use and circulation patterns, define open space and recreation facilities, and other areas requiring special consideration or study. Environmental resources of importance and uniqueness, as well as environmental hazard areas, are also mapped, as well as public and quasi-public facilities. These official maps carry equal authority to the goals and policies of the General Plan.

The Elements of the General Plan

The California General Plan Guidelines cite Government Code Section 65302, which establishes seven (7) mandatory elements of the General Plan: Land Use, Circulation, Housing, Conservation, Open Space, Safety, and Noise. The State General Plan Guidelines also provide flexibility to jurisdictions in developing their General Plans. In this regard, some of the required elements may be addressed in combination with others, such as Open Space and Conservation.

Consistent with State Guidelines, all of the mandated elements are found within the Cathedral City General Plan, which integrates the mandatory and discretionary elements into five (5) major chapters. They are organized to reflect compliance with State requirements that the General Plan be internally consistent, comprising an integrated and compatible statement of policies for the City. Each element of the General Plan has equal legal authority.

Community Development and Design Chapter
This chapter has the most direct effect on the character and quality of life of the community through the definition and distribution of land uses, the intensity of various types of development, densities and types of housing, roadway and circulation plans, provision and distribution of parks and recreational facilities, architectural and community design guidelines,

arts and culture, and the preservation and enhancement of a healthy economy. This chapter includes the following General Plan elements:

Community Development and Design

* Administration Element
* Land Use Element
* Traffic and Circulation Element
* Housing Element
* Parks and Recreation Element
* Community Design Element
* Arts and Culture Element
* Economic Development Element

Public Facilities and Services Chapter
Providing basic utility infrastructure and public services are among the principal concerns of local government. So, to, are the provision of police and fire protection, and access to educational and health services. Providing emergency services is also an essential role of local government. The goals and policies in each element are meant to assure an adequate level of services and facilities commensurate with the level of development anticipated in the City. The Public Facilities and Services chapter of the General Plan includes the following elements:

Public Services and Facilities

* Public Utilities Element
* Fire and Police Protection Element
* Health Services Element
* Public Buildings and Facilities Element
* Schools and Libraries Element
* Emergency Preparedness Element

Environmental Resources Chapter
The resources of the physical natural environment, including man-made artifacts of historical or archaeological significance, biological resources, open space and conservation and other natural resources are addressed in this chapter. Goals and policies are set forth within each element to assure the preservation and enhancement of the physical environment and resources as important assets of the community. The Environmental Resources chapter includes the following elements:

Environmental Resources

* Air Quality Element
* Archaeological and Historic Resources Element
* Biological Resources Element
* Water Resources Element
* Open Space and Conservation Element
* Energy and Mineral Resources Element

Environmental Hazards Chapter
The hazards of the physical environment, including man-made hazardous conditions and toxic materials, are addressed in this chapter of the General Plan. Goals and policies are set forth in each element, which identify specific hazards and means of assuring the protection of public health, safety and welfare. Hazards of particular concern to the City are given special attention in this chapter. The Environmental Hazards chapter of the General Plan includes the following elements:

Environmental Hazards

* Geotechnical and Seismic Element
* Noise Element
* Hazardous and Toxic Materials Element
* Flooding and Hydrology Element

Administering The General Plan

Serving as the foundation upon which all land use and related decisions are based, the General Plan is often called the "constitution" of the City. In conjunction with its Program EIR, the General Plan is a comprehensive information and planning guide established by State law to provide a framework for making informed decisions about the future of the community. The community's land use, circulation, environmental, economic and social goals and policies as they relate to land use and development are documented and addressed in the general Plan.

The Plan and supporting environmental documentation identify concerns and issues important to the community, analyze them, and establish goals, policies, and program implementation measures, which resolve identified issues and promote a community vision. They also provide the basis for a rational nexus to support development, mitigation measures and exactions. Special studies and performance programs are also integral parts of the goals, policies, programs and measures which assure effective implementation of the General Plan.

Determining Consistency with the General Plan

Development proposals, whether developer or City initiated, must be analyzed and tested for consistency with the goals, policies, and programs in every applicable element of the General Plan. On an on-going basis, the City must assure and maintain consistency of adopted Specific Plans and the City Zoning Ordinance with the General Plan. This test of General Plan

compliance is also a required criteria for determining significant impacts under the provisions of the California Environmental Quality Act (CEQA).

Interpreting the General Plan

Whenever uncertainty exists regarding the location of boundaries of any land use category, proposed public facility symbol, circulation alignment, or other symbol or line found on the official maps, the following procedures will be used to resolve such uncertainty. Boundaries shown in the General Plan and on official maps as approximately following the limits of any municipal corporation are to be construed as following these limits. Boundaries shown as following or approximately following section lines, half or quarter section lines shall be construed as following such lines.

Whenever boundaries are shown following or approximately following the centerline of streams, creeks, rivers, or other continuously or intermittently flowing streams or creeks, these boundaries are to be construed as following the channel centerline of these water courses taken at mean low water, and, in the event of natural change in the location of such streams or other water courses, the zone boundary is to be construed as moving with the channel centerline.

In instances where a land use category applied to a parcel is not mapped to include an adjacent street or alley, the category shall be considered to extend to the centerline of the right of way. Boundaries shown as separated from, parallel, or approximately parallel to any of the features listed above shall be construed to be parallel to such features and at such distances therefrom as are shown on the map. Symbols that indicate appropriate locations for proposed public facilities are not property specific. They indicate only the general area within which a specific facility should be established.

California Environmental Quality Act (CEQA) Review of Consistency

The Guidelines of the California Environmental Quality Act (CEQA Guidelines) require that an initial study include "an examination of whether the project is compatible with existing zoning and plans." The CEQA Guidelines further stipulate that, "A project will normally have a significant effect on the environment if it will conflict with adopted environmental plans and goals of the community where it is located." If a determination is made by the Planning Commission or the City Council that the proposed action is inconsistent with the General Plan, no further action shall be taken without the completion and processing of an EIR or other detailed analysis, which would support a finding of overriding consideration.

Determining Zoning Consistency

California State law also mandates that the City's Zoning Ordinance be consistent with the General Plan. In the event that the Zoning Ordinance becomes inconsistent with the General Plan by reason of a General Plan Amendment, the Zoning Ordinance must be amended within a reasonable time so that it is made consistent with the General Plan, as amended. The Zoning Ordinance cannot be amended if it causes an inconsistency with the General Plan.

Amendments To The General Plan

The General Plan can and should be viewed as a dynamic and multi-faceted document, defining and addressing the changing needs of the community. General Plan issues require on-going assessment and an understanding of existing and projected community needs. Short-term programs and policies should be reviewed annually to reflect compatibility with budgetary priorities, and to assure that the General Plan is kept current with changing conditions and circumstances. Long-term programs must also be given forward planning consideration to assure timely funding and development of critical infrastructure and public services and facilities.

Annual Review

California Government Code requires that the planning agency "render an annual report to the legislative body (City Council) on the status of the Plan and the progress in its implementation" (Section 65400(b)). State law further requires that the Housing Element be reviewed and updated at least once every five (5) years.

Mandatory elements of the General Plan may be amended up to four (4) times in each calendar year. The City Council or any citizen may initiate a General Plan Amendment. It is left to the discretion of the local jurisdiction to establish an amendment schedule to be published one year in advance.

Application Procedures To Amend The General Plan

The General Plan or any portion thereof may be amended by filing an application and the appropriate fees are filed with the City Planning Department. An amendment to the General Plan constitutes a project under the California Environmental Quality Act (CEQA), and therefore is evaluated for its environmental effects and consistency with other elements of the General Plan. Final approval of General Plan amendments is the responsibility of the City Council.

Exemptions Applicable To General Plan Amendments

The State Legislature has recognized that occasions arise which require the local jurisdiction to have some flexibility in amending the General Plan. As set forth in the California Government Code, the following are exempt from the General Plan amendment schedule.

(1) Amendments requested and determined necessary for the development of a residential project, of which at least twenty-five percent (25%) of its units will be available to persons of low or moderate income (Sections 65361(b) and 65358(d)).

(2) Any amendment necessary to comply with a court decision in a case involving the legal adequacy of the General Plan (Sections 65361 and 65358 (d) (1)).

Community Plans, Area Plans And Specific (Precise) Plans

The State General Plan Guidelines recognize three types of sub-plans, including the Community Plan, Area Plan and Specific Plan. Community and Area Plans focus on a particular region or

community within the overall General Plan area and must be consistent with the overall General Plan. This type of plan is adopted as an amendment to the General Plan in conformance with Government Code Section 65350 et. seq. The "community" or "area" plan includes refined policies and programs implemented by ordinances and other discretionary action, such as zoning.

The Specific (Precise) Plan can consist of both policies and programs, as well as development regulations (see Government Code Section 65450 et. seq.). This type of plan is most commonly used to master plan large and/or mixed use developments, which require a specific or precise analysis of land use planning, design and regulation. Specific Plans contain text, exhibits, and diagrams indicating the distribution, location, and intensity of proposed land uses and the necessary public and private urban support systems, including streets, utilities and drainage facilities.

The Specific or Precise Plan also defines the standards and criteria by which development and, where applicable, open space conservation will proceed on the property. This plan also provides implementation measures and financing necessary to carry out the project. It must be consistent with all facets of the General Plan and in turn, zoning, subdivision, and public works projects must be consistent with an existing Specific Plan (Government Code Section 65455).

Specific Plans are prepared, adopted and amended in the same manner as a General Plan, may be adopted by resolution or ordinance, and may be amended as often as deemed necessary by the City Council.

Planning Capital Facilities

One of the statutory responsibilities of California incorporated towns, cities and counties is to "annually review the capital improvement program of the city or county and the local public works projects of other local agencies for their consistency with the General Plan." Also, pursuant to Government Code Section 65401, all departments within the City and all other local government agencies must submit a list of proposed projects to the City. The City is required to review these projects for conformity with the General Plan.

General Plan Implementation

Local jurisdictions must continuously and consistently implement the General Plan once it has been adopted in conformance with Government Code Section 65103(c). The Cathedral City General Plan relies on element programs and strategies, as well as the related mitigation measures and programs set forth in the General Plan Program EIR, to serve as implementation measures. The City Zoning Ordinance is also essential in implementing the goals and policies of the Plan. Community, Area and Specific Plans provide detailed implementation programs for distinct or complex portions of the General Plan area.

The Zoning Ordinance and General Plan Implementation

The primary tool for implementing the General Plan is the Zoning Ordinance, which constitutes an exercise of police powers granted to the City by the State. It regulates land use by distinct development zones and permitted uses. These are set forth in the form of text, maps, diagrams

and other materials, which describe the distribution and intensity of land uses into such categories as residential, commercial, industrial and open space. Minimum development standards are established through written regulations for each of the land use zones that are consistent with the General Plan. Permitting processes set forth in the Zoning Ordinance, including Conditional Use Permits, Variances, Architectural Reviews and other land use permitting also implement the General Plan. The implementation of the General Plan is further regulated by Government Code Sections 65800 et. seq.

The Subdivision Ordinance and the General Plan

The subdivision ordinance, like the Zoning Ordinance, is also an exercise of police powers and a principal instrument for implementing the General Plan. Establishing state-wide uniformity in local subdivision procedures, the State Subdivision Map Act (Government Code Sections 66410 et seq.) leaves the standards for regulating the design and improvement of subdivision to local government. The broadest authority for regulating subdivisions lies in Government Code Sections 66473.5, 66474, 66474.60, and 66474.61, requiring findings that, among other things, the subdivision is consistent with the City General Plan and any applicable Specific Plan.

Development Agreements

Government Code Section 65865 et seq. provides for the adoption of development agreements between a project proponent and the City. Development agreements provide developers with additional assurances that development approvals will not be nullified by some future local policy or regulation change. In turn, the development agreement may require the developer to meet certain conditions or performance criteria which become part of the agreement.

Development agreements can be a useful means of meeting General Plan goals and policies, while removing some of the uncertainties faced by developers. Agreements generally remain in effect for several years, the term typically being set forth in the agreement.

As set forth in Government Code Section 65866, the City, unless otherwise provided by the development agreement, is not prevented from applying new rules, regulations, and policies which do not conflict with those rules, regulations, and policies applicable to that property. Neither is the City prevented from denying or conditionally approving any subsequent development project application on the basis of existing or new rules, regulations or policies.

City Commissions and Committees

State law also empowers the City to establish advisory commissions or committees, which may be comprised of public officials as well as private individuals, to review and make recommendations on policies or programs facilitating implementation of the General Plan. These commissions typically address such issue areas as parks and recreation, trails, libraries, public safety, community and architectural design, affordable housing and emergency preparedness. The City Council may establish commissions or committees to address specific and focused issues, or to provide recommendations on an on-going basis. The Council may perpetuate or dissolve these commissions or committees as it sees fit.

SUMMARY

Effective administration and implementation of the General Plan are set forth in the Administration Element, and rely on the development and maintenance of City regulatory documents. These include the Zoning Ordinance, Specific/Precise Plan requirements, the Subdivision Ordinance, and City Rules for the Implementation of CEQA. The General Plan is a living document with mandates for frequent review and refinement. Amendments to the Plan shall be given careful and thoughtful consideration. The goal, policies, programs and implementation strategies of the Element will help to assure the effective administration and implementation of all elements of the Cathedral City General Plan.

GOAL, POLICIES AND PROGRAMS

Goal

The comprehensive and integrated administration and implementation of all elements of the Cathedral City General Plan through consistent and effective policies and programs.

Policy 1
The General Plan shall be periodically revised and updated, and shall ensure the conformance of City ordinances, including the Zoning and Subdivision Ordinances with the General Plan.

Program 1.A
Through the public hearing process, the City Council shall receive an annual report from the Planning Commission on the status of the General Plan and shall make recommendations which address identified inadequacies or opportunities for updating the Plan.
Responsible Agency: City Council; Planning Commission; Planning Department
Schedule: Annually.

Program 1.B
The City Zoning and Subdivision Ordinances shall be comprehensively reviewed and amended, as necessary, to maintain consistency with the General Plan.
Responsible Agency: Planning Department; Public Works Department
Schedule: Annually

Policy 2
Community, Area Specific and Precise Plans should be thoughtfully used as a method of detailed and systematic implementation of the General Plan.

Program 2.A
The preparation of Community, Area, Specific and Precise Plans will be directed by application materials and guidelines developed by the City, and their use will be encouraged for distinct neighborhoods or complex projects involving multiple land uses or projects which have either environmental or geophysical issues associated with the property.
Responsible Agency: Planning Department
Schedule: On-going

Policy 3
The long-term implications of General Plan policies and programs will be periodically examined and reviewed, especially as they relate to the availability of infrastructure and the City's ability to provide public services and facilities.

Program 3.A
The City shall conduct an annual review of the General Plan, as set forth in Program 1.A, above, which shall include a report on interrelationships, impacts or enhancements of the General Plan with regard to the availability of infrastructure and City's ability to fund public services or secure public facilities.
Responsible Agency: City Council; Planning Commission; Planning Department
Schedule: Annually.

Policy 4
Establish and maintain a cooperative planning process with neigh boring cities, Riverside County and the Agua Caliente Band of Mission Indians' Tribal Council, and assure an effective regulatory or advisory role regarding any and all development and land use planning issues proposed within or in close proximity to the City's Sphere-of-Influence.

Program 4.A
Establish agreements with adjoining cities, Riverside County and the Agua Caliente Tribal Council to review all proposed land use and other development proposals, recognize the City's advisory role, and request that the County and Tribal Council forward copies of all development plans proposed within the advisory area to the City for review and comment.
Responsible Agency: City Council; Planning Department; City Attorney; Economic Development Department; Redevelopment Agency
Schedule: 2002-03; Continuous.

Policy 5
The City shall assure and facilitate properly filed development applications, which shall be processed in an expeditious and timely manner.

Program 5.A
The City shall establish and maintain application materials and processing procedures that assure expeditious and timely processing of land development applications, including "fast tracking" procedures for priority development proposals.
Responsible Agency: City Council; Planning Commission; Planning Department
Schedule: Continuous.

Policy 6
Utilize capital improvement, master facility and similar plans to address the City's recreation, drainage/flood control, infrastructure, utility management, traffic control, and other facility needs.

Program 6.A
As part of the City's planning for capital improvement programs, the City shall develop master facility plans to establish availability of, need and financing for expanded public services and facilities. Master plans should also include schedules for phased implementation, which shall be incorporated into the City's capital improvement programs.
Responsible Agency: City Council; Engineering Department; Planning Department
Schedule: 2002-03; as required by development.

Policy 7
Encourage in-fill development within the corporate boundaries of the City, and expansion of new development which is logically phased and, as appropriate, guided by the development of existing and new Community, Area, Specific or Precise Plans.

Policy 8
In order to assure adequate community involvement, the City shall provide opportunities for review and comment on development proposals through public hearing notices sent to owners of property located at least within 300 feet of the development proposal site.

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CHAPTER III

COMMUNITY DEVELOPMENT

The Community Development chapter includes the following elements: Land Use, Circulation, Housing, Parks and Recreation, Community Design, and Economic and Fiscal Development. This chapter significantly influences the character and quality of life in the community, the distribution of land uses, the intensity and types of housing, the provision of parks and recreational facilities, the establishment of architectural and community design guidelines, the preservation of scenic vistas, and the preservation and enhancement of a healthy economy.

LAND USE ELEMENT

PURPOSE

The Land Use Element defines the various land use categories assigned to lands within the City and its Sphere-of-Influence. The element also crystallizes technical discussions and analyses from other General Plan elements and the Plan's Program EIR, and provides appropriate goals, policies and programs to help direct further development and ultimate buildout of the community. The Land Use Element is the broadest and most far-reaching of all General Plan elements and, in conjunction with General Plan EIR, serves as the foundation for land use policy development.

BACKGROUND

California Government Code Section 65300 requires cities and counties to prepare and adopt "a comprehensive, long-term general plan for the physical development" of the community. The General Plan must also designate lands for housing, business, industry, open space, as well as other uses deemed appropriate by the City (Government Code Sections 65302(a). The Element also incorporates designations reflecting physical development and land use, consistent with Government Code Section 65303. It incorporates mapping of the General Plan land use distributions and provides statements relating to standards of development, intensity and population density. Policies and programs associated with each of the major land use categories are set forth in the Land Use Element and reflect the compatible and integrally planned distribution of land uses reflected in the Plan.

LAND USE CATEGORIES

The Land Use Element and the official General Plan Land Use Map describe and designate the distribution of land uses by type, location, intensity and/or extent of use. Uses to be considered are diverse and include: residential, commercial, industrial, open space, recreation, public buildings and facilities, and other categories of public and private land uses.

Prior to the adoption of the Cathedral City General Plan comprehensive update, the City utilized the land use designations and assignments adopted in the 1987 Plan. A comprehensive assessment of existing land uses and their distribution was conducted using field surveys, aerial photo analysis and a computer-based geographic information system (GIS).

Table III-1 provides a summary description of the City's proposed General Plan land use designations, and Tables III-2 and III-3 provide statistical summaries of these land uses. Overall land use goals, policies and programs then follow. A discussion of each major land use category is also presented, followed by related goals, policies and programs.

Table III-1
City of Cathedral City Draft General Plan
Proposed Land Use Designations

Land Use Designation (Density)	Purpose of Land Use
Residential	
(HR) Hillside Reserve (0-1 du/20 ac)	This designation provides for development densities of one dwelling unit per 20 acres. Development could be precluded on these lands due to topographic, hydrologic, aesthetic or other constraints. In such cases, development rights could be preserved by density transfer or similar mechanism.
(RE) Estate Residential (0-2 du/ac)	The residential estate designation provides for larger lot subdivisions with single-family residential development. This designation is envisioned for rural areas, as well as lands which may also be constrained by topography or other natural restrictions. This type of development may also incorporate a "greenbelt" buffer to help define the City's urban boundary.
(RL) Low Density Residential (2-4.5 du/ac)	The Low Density Residential designation provides for single-family residential development on individual lots typically ranging from about 7,500 to 20,000 square feet. These lands serve to buffer more dense residential development from estate residential uses and may be appropriate in areas with some site constraints.
(RR) Resort Residential (3-6.5 du/ac)	This low density designation is intended to accommodate single-family and attached residential development in a master planned resort setting. On-site amenities typically include golf courses, tennis and swimming facilities, as well as tourist/resort-serving commercial uses. This designation also allows hotels/motels and ancillary visitor and tourist-serving commercial uses.

(RM) Medium Density Res. (4.5-10 du/ac)	This designation provides for moderately low to medium density subdivisions and Planned Unit Developments (PUDs). It serves to transition between lower and more moderate (medium) residential densities. Product types typically range from single-family to multi-family development, with much of existing development being duplex units on 8,000 square foot lots.
(RH) High Density Res. (11-20 du/ac)	This designation allows for the greatest diversity and highest density of residential development, providing for a full range of multi-family dwellings, including apartments and condominiums. It is also suitable for planned communities and affordable and senior housing, where smaller units and higher densities may be appropriate. Multi-family development provides for PUDs comprised of a varying range of residential types and on-site amenities. These lands are typically located in close proximity to neighborhood commercial uses, thereby maximizing pedestrian access to these essential services. Mobile home parks or subdivisions with PUD-type development may also be allowed.
(PUD) Planned Unit Developments	While not a land use designation, Planned Unit Developments (PUDs) consolidate areas for structures, common open space and recreation areas, and integrate access onto private internal roadways. PUDs permit the transfer of densities from open space/recreation areas provided within the development, thus consolidating open space. The purpose of the PUD is to promote planned residential development and amenities beyond those typically provided within conventional subdivisions, to achieve greater flexibility in design, varying ranges of densities, and to encourage well planned neighborhoods through creative and imaginative planning. The PUD also allows an appropriate mix of housing types, which are unique in their physical characteristics to warrant special methods of residential development. A full range of residential development is permitted, consistent with the underlying land use designation.

Commercial

(CG) General Commercial

These lands include a wide variety of commercial centers, ranging from general merchandising and strip commercial centers, to community and regional scale centers. Office development is also appropriate in areas with this designation. Development may range from free-standing retail buildings and restaurants to planned commercial centers. Hotels and motels may also be appropriate on these lands, which are located primarily along major corridors and take advantage of convenient access and tourist and business amenities.

This designation also provides for the development of commercial centers that serve the entire community and the larger regional market, including supermarket anchors and big box retailers. Community-scale development should take advantage of regional transportation networks and be designed to accommodate transit facilities. Such centers may also host ancillary office components, as well as regional institutions and services.

(CN) Neighborhood Commercial

This designation is assigned to existing neighborhood centers and vacant lands appropriate for this use. It provides for neighborhood-scale shopping integrated with, and conveniently located as a part of residential areas. A mix of land uses may also be considered appropriate within this category. Neighborhood commercial uses are also employment centers and should facilitate pedestrian, bicycle and public transit access to the greatest extent practical.

Neighborhood Commercial centers may be anchored by supermarkets and super drugstores and provide a wide variety of supporting commercial services, including banking and similar financial services, businesses and offices, dry cleaners, restaurants, barber shops/beauty salons, and similar commercial outlets serving day-to-day neighborhood needs. These centers typically range in size from 8 to 10 acres and provide about 40,000 to 100,000 square feet of gross leasable floor area.

(DTC) Downtown Commercial

This designation is assigned to a limited area in the Downtown core (as defined by the Downtown Precise Plan) and takes advantage of the convenient access of the East Palm Canyon Drive corridor. Land use, zoning policies and design criteria for the area are established by the Downtown Precise Plan. Permitted land uses include Downtown Residential Neighborhood and Mixed Use Commercial. This designation also provides for a variety of commercial centers, ranging from storefront scale buildings and office space, to lodging and entertainment establishments. The Civic Center and associated civic facilities are also appropriately located within this area.

Industrial

(BP) Business Park

This designation is intended for light industrial and related uses which are compatible with one another, as well as with neighboring residential and commercial uses. Other potentially appropriate uses include professional offices, including administrative, corporate, institutional, legal, medical, financial, insurance, real estate, and government offices.

(I) Industrial

This designation provides for the development of any and all industrial uses operating entirely in enclosed buildings, and those requiring limited and screenable outdoor storage. Examples include clean manufacturing operations, warehousing and distribution facilities, mini-warehouse storage, and a variety of light manufacturing businesses. Siting industrial lands in close proximity to major regional highway and railroad facilities is desirable. Preferred development includes master planned industrial parks with integrated access and internal circulation. Business parks may also be permitted, provided their compatibility with other industrial uses is assured.

This designation may also allow conditional and/or discretionary development of more intense industrial uses with the potential to generate substantial levels of noise, smoke, dust, glare, traffic, vibration, or other nuisances.

	Examples include the manufacturing of durable goods, such as appliances, furniture, fabricated metal products, and light electrical and transportation equipment. These uses may also have a potential for greater dependence on outdoor storage. Proponents will be required to mitigate any adverse impacts to acceptable or insignificant levels, demonstrate conformance with all community environmental standards, and be compatible with existing and planned land uses.
Institutional Services and Facilities	
(P) Public/Quasi-Public	This designation serves as a prefix for a variety of quasi-public and public uses delineated on the Land Use map. It is used to recognize such uses as the Civic Center and other governmental offices, libraries, schools, hospitals, police and fire stations, utility substations, and other public and quasi-public facilities.
Institutional Symbols	
(P/CC) Civic Center	Civic Center and related facilities
(P/FS) Fire Station	Fire Station
(P/PS) Police Station	Police Station
(P/M) Medical Facility	Hospitals and similar in/out patient medical facilities. Also may be assigned to convalescent and skilled nursing facilities.
(P/L) Library	Library
(P/S) School	Educational facilities such as daycare, elementary, intermediate, high, special, and technical schools.
(P/PO) Post Office	Post Office
(P/C) Cemetery	Cemetery
(P/T) Transportation	Interstate-10 and Union Pacific Railroad transportation corridors.
(P/U) Utilities	Utility substations, including wells and water tanks, electric, telephone, gas, water and similar facilities.

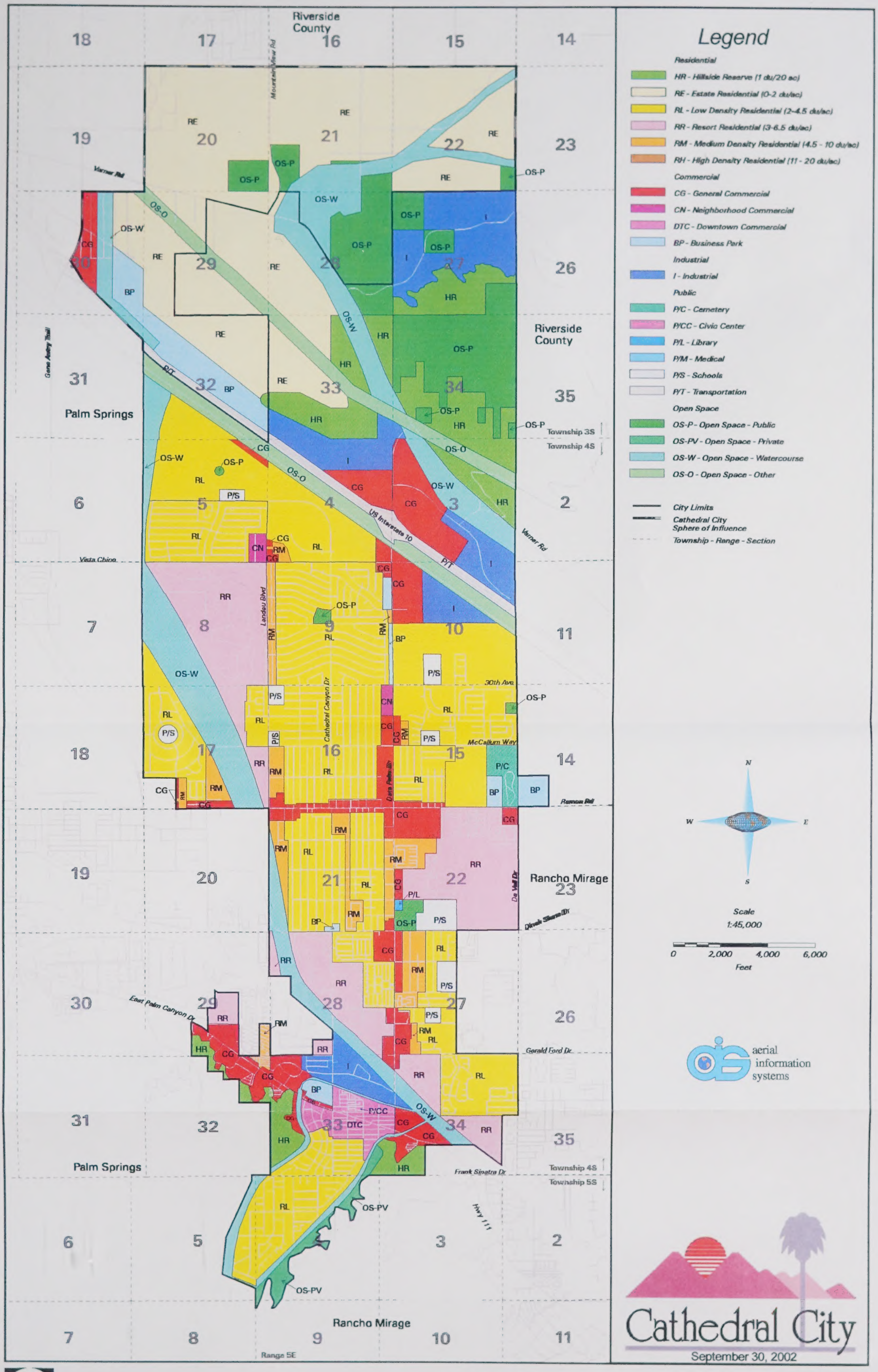
Open Space

(OS-P) Parks and Public Open Space	Public parks and open space lands determined to be special, important or valuable natural resources which warrant protection. This designation is assigned to park lands and other recreational amenities.
(OS-PV) Open Space - Private	This designation may be assigned to private open space areas that are preserved for this use. These lands include private golf courses, lakes, tennis facilities, pools and other open space/recreation facilities, which are typically located within planned residential communities.
(OS-O) Open Space - Other	This designation may be used to define a variety of open spaces and special resource areas, or those that may pose threats or hazards to development. Examples include large habitat areas preserved for biological purposes, as well as geologic hazard areas, detention or retention basins, trails, etc.
(OS-W) Open Space-Watercourse	This designation is used to delineate floodways, including natural and man-made floodway and drainage channels.

Specific or Precise Plans

Specific Plans are to be used as development tools for projects or locations which have special development needs, including the Downtown and other master planned areas. Specific Plans are to be applied to projects which propose a mix of uses, or projects which have either environmental or geophysical issues associated with the property.

Specific and Precise Plans will provide detailed design guidelines and analyses of the projects to which they apply, including the distribution, location, and intensity of proposed land uses. They also examine the required level of public facilities and services and their availability, and they should help establish the economic viability of proposed developments. Standards and requirements for Specific Plans will be included in the Zoning Ordinance.



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City of Cathedral City
General Plan
Land Use Map

Exhibit
III-1

Table III-2
City of Cathedral City
Land Use Acreage Summary

Land Use Category	Density	Acres in City	% of City Acres	Acre in SOI	% of SOI Acres
HR Hillside Reserve	1 du/20ac	864	6.9%	4	0.1%
RE Estate Residential	0-2 du/ac	664	5.3%	2,133	65.3%
RL Low Den. Residential	2-4.5 du/ac	4,323	34.6%	0	0.0%
RR Resort Residential	3-6.5 du/ac	1,381	11.0%	0	0.0%
RM Med. Den. Residential	4.5-10 du/ac	412	3.3%	0	0.0%
RH High Den. Residential	11-20 du/ac	0	0.0%	0	0.0%
Residential Subtotal		**7,644**	**61.1%**	**2,137**	**65.4%**
CG General Commercial		969	7.8%	71	2.2%
CN Neighborhood Commercial		37	0.3%	0	0.0%
DTC Downtown Commercial		151	1.2%	0	0.0%
Commercial Subtotal		**1,157**	**9.3%**	**71**	**2.2%**
BP Business Park		112	0.9%	234	7.2%
I Industrial		886	7.1%	0	0.0%
Industrial Subtotal		**998**	**8.0%**	**234**	**7.2%**
P Public/Quasi-Public		**360**	**2.9%**	**51**	**1.6%**
OS-P Open Space-Public		641	5.1%	344	10.5%
OS-PV Open Space-Private		80	0.6%	0	0.0%
OS-W Open Space-Watercourse		1,138	9.1%	383	11.7%
OS-O Open Space-Other		484	3.9%	47	1.4%
Open Space Total		**2,343**	**18.7%**	**774**	**23.6%**
Total		**12,502**	**100%**	**3,267**	**100%**

Table III-3
City of Cathedral City
Land Use Buildout Statistical Summary

Land Use Category	Total Acres	Dev. Acres	Vacant Acres	Exist Units	Potential Units[3]	Bldout Units
HR Hillside Reserve (1du/20ac)	868	9	859		32	32
RE Estate Res. (0-2du/ac)	2,797	102	2,694		4,041	4,041
RL Low Density (2-4.5du/ac)	4,323	2,635	1,689	10,779[1]	5,700	16,479
RR Resort Res. (3-6.5du/ac)	1,381	942	439		2,140	2,140
RM Med. Density (4.5-10du/ac)	412	282	130	7,137[2]	978	8,115
RH High Density (11-20du/ac)	0	0	0		0	
Residential Subtotal	**9,781**	**3,970**	**5,811**	**17,916**	**12,886**	**30,807**
				Existing Sq.Ft.[4]	**Future Sq.Ft.[4]**	**Total Sq.Ft.[4]**
CG General Comm.	1,040	437	603	4,226,191	5,778,669	10,004,860
CN Neighborhood Comm.	37	1	36	9,583	344,955	354,538
DTC Downtown Comm.	151	145	6	1,389,564	57,499	1,447,063
Commercial Subtotal	**1,228**	**583**	**645**	**5,625,338**	**6,181,123**	**11,806,461**
BP Business Park	346	88	258	1,229,263	3,835,893	5,065,156
I Industrial	886	134	752	1,984,593	11,137,420	13,122,013
Industrial Subtotal	**1,232**	**222**	**1,010**	**3,213,856**	**14,973,313**	**18,187,169**
P Public/Quasi-Public	**411**	**370**	**41**	---	---	---
OS-P Open Space-Public	985	253	732	---	---	---
OS-PV Open Space-Private	80	0	80	---	---	---
OS-W Open Space-Watercourse	1,521	366	1,155	---	---	---
OS-O Open Space-Other	531	304	227	---	---	---
Open Space Subtotal	**3,117**	**923**	**2,194**	---	---	---
Total	**15,769**	**6,068**	**9,701**	---	---	---

[1]Includes attached and detached single family housing units, as categorized by CA. Dept. of Finance, 2000
[2]Includes multi-family housing units from two to five-plus and mobile homes, as categorized by CA. Dept. of Finance, 2000
[3]Future residential development is assumed to occur at 75% of the maximum density permitted.
[4]Assumes 22% lot coverage for commercial development, and 34% lot coverage for industrial development, which represent standard single-story development, as described in the Urban Land Institute's "Project Reference File," 1991.

GENERAL LAND USE GOALS, POLICIES AND PROGRAMS

Goal 1

A complete, balanced and integrated pattern of land uses appropriately scaled and designed to meet the domestic, productive and social needs of all members of the community, while providing a varied and cohesive fabric that is sustainable, empowering and humanizing.

Goal 2

A land use plan and pattern that preserves and enhances the integrity of neighborhoods, districts and corridors, while optimizing the community's natural assets, regional transportation systems, and opportunities for housing, employment and economic base-building.

Policy 1
Land use categories and zoning districts shall reflect the Ahwahnee (neo-traditional or new urbanism) Principles by providing land planning and development standards that encourage the creation of integrated neighborhoods, districts and corridors.

Policy 2
All land use planning shall be directed toward the creation of internally integrated neighborhoods and development districts, which also enhance and optimize their connections to surrounding neighborhoods and districts.

Program 2.A
The City shall assure that development plans are responsive to the wishes and aspirations of the neighborhood or district in which they are located, and shall require that land uses provide an appropriate interface with adjoining neighborhoods and districts.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

Program 2.B
The Zoning Ordinance shall be amended to include standards and requirements for the preparation of Specific Plans.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

Policy 3
The City shall adopt, implement and maintain an area-specific Downtown Plan, which shall integrate a mix of civic, tourist and recreational commercial, educational and residential uses around the East Palm Canyon development corridor.

Program 3.A
The City shall implement and periodically review the Downtown Precise Plan, and assure that it is responsive to the guiding Ahwahnee principles to provide a vibrant and dynamically integrated mixed use neighborhood in the heart of the community.
Responsible Agency: Redevelopment Agency, Planning Department, Planning Commission, City Council
Schedule: On-going, Annual reporting

Policy 4
In-fill development and lot consolidation shall be encouraged as means of enhancing existing development and as a means of optimizing the use of existing roadways and utility infrastructure.

Program 4.A
The City and, where appropriate, its Redevelopment Agency, shall identify areas of the City where in-fill development and lot consolidation are appropriate vehicles for efficient and timely development. The City/RDA shall consider such incentives as density/use intensity bonuses, City participation and other approaches that encourage in-fill and lot consolidation and development. An explicit program shall be developed, implemented and regularly monitored and reported upon.
Responsible Agency: Redevelopment Agency, Planning Department, Planning Commission, City Council
Schedule: 2002-03, On-going monitoring, Annual reporting

Policy 5
Land use planning and development proposals north of Interstate-10 shall take into consideration physical constraints and limited infrastructure of the area, and shall be planned through the development and implementation of Specific Plans when applicable.

Policy 6
Land use planning and development in the vicinity of the City's mountains and hillsides shall be consistent with the City's Hillside Protection Program and inherent physical constraints, and shall be applied to City lands as well as those located in adjoining jurisdictions.

Policy 7
The goals, policies and programs of the Land Use Element and other relevant elements shall be periodically reviewed in the context of land development activities.

Program 7.A
The City shall annually review the progress made in implementing the Land Use Element of the General Plan, including evaluating land use trends and their correspondence to the Plan's goals and policies. Applicable goals, policies and programs shall be updated and revised, as appropriate, in response to this evaluation.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going, Annual reporting

Policy 8
The development districts and standards of the City Zoning Ordinance/Development Code shall correspond to the goals, policies and programs of the General Plan and the guidance provided by the Plan Program Environmental Impact Report.

Program 8.A
The City shall review the consistency of the Zoning Ordinance/Development Code with the General Plan, and shall amend or revise the ordinance/code to assure compatibility and consistency, and to optimize the function of the ordinance/code as the primary implementing tool of the General Plan.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: 2002-03; Annual review & report

Policy 9
The consideration of major development proposals shall include an assessment of their economic viability, and fiscal costs and benefits associated with such proposals.

Program 9.A
The City shall consider and, as deemed appropriate, shall require the preparation of market feasibility studies and/or fiscal impact analyses for major development projects, including but not limited to those involving General Plan Amendments.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

RESIDENTIAL LAND USES BACKGROUND

Cathedral City is arguably one of the most balanced communities in the Coachella Valley. Since its incorporation in the early 1980s, the City has evolved to provide residents with a wide range of residential opportunities, ranging from neighborhood and resort single-family development, to quality high-density affordable and senior housing. According to various sources of housing and population data, in 1990 the City had approximately 15,229 housing units, of which about 56% were single family (attached and detached), 24% were multi-family, and 20% were mobile homes.

By the Year 2000, the City had a total of 17,916 dwelling units. Over this ten-year period, the housing mix changed modestly, with about 60% single family (attached and detached), 24% multi-family, and 16% mobile homes. The percentage of the City's housing stock in single family units increased by about 4%, mobile homes as a percentage of the total decreased by about 4%, and multi-family units stayed about the same. New single family residential in the northeastern portion of the City had the greatest effect on the overall housing mix over this 10-year period.

In 1990, the City's population was approximately 30,085, and the City had an average household size of 2.75 persons. By 2000, the City population had risen to 42,647 (a 42% increase over 1990) and the average household size had risen to 3.03 persons.

The City's 2000 average household size is comparable to that of the Riverside County average of 2.98 persons per household, but is substantially larger than that of neighboring Palm Springs (2.05) and Rancho Mirage (1.92).

The General Plan provides for a wide range of residential unit types and densities, ranging up to twenty (20) dwelling units per acre within six basic residential land use categories, including Hillside Reserve (1 du/20 ac) and High Density (11-20 du/ac). Upon buildout of the General Plan planning area, the City could have a total of up to 30,807 dwelling units and a permanent population of up to 93,345. This projected population assumes current (2000) household densities and a 25% reduction in acreage for streets and parkways in each category.

The City and all other jurisdictions in California are required by law to assure the provision and availability of decent housing and a suitable living environment for all economic segments of the community, with special attention to very low, low and moderate income groups. The elderly, those paying too much for rent/mortgages and those living in overcrowded conditions are identified special groups that require special attention when providing for the community's housing needs. Each of these groups has found acceptable housing opportunities in Cathedral City. For additional information addressing these and other related issues associated with community housing stock, please refer to the Housing Element.

RESIDENTIAL LAND USE GOALS, POLICIES AND PROGRAMS

Goal 1

Residential neighborhoods and developments that provide safe, wholesome and enhancing environments for living, enjoyment, growth and development of all residents, including the community's children and seniors.

Goal 2

Residential developments of distinctive character that provide a full range of housing types, products and costs to accommodate the needs of existing and future residents of the community.

Policy 1
Existing residential neighborhoods and vacant residential lands shall be managed and regulated to enhance the distinct character of each, while assuring compatibility between existing and future development.

Policy 2
In-fill development shall be encouraged on partially built-out subdivided lands, where major investments in streets and infrastructure have already been made, while ensuring the maintenance of the integrity of the neighborhood.

Policy 3
Development proposals on non-contiguous or isolated lands shall be discouraged to avoid the creation of irregular, disruptive and inefficient development patterns, by requiring that such development provide the full range of urban services and facilities found in the urban core areas of the community.

Policy 4
Prioritize efforts to arrest the deterioration of residential neighborhoods by actively addressing the root causes, including absentee and frequently negligent ownership of small and inefficient rental properties, the lack of home ownership and vesting in residential neighborhoods, and through effective code enforcement.

Program 4.A
The City shall initiate and pursue an active program of code enforcement and owner education to assure that absentee owners are responsive to the needs of their tenants and the codes and regulations of the City.
Responsible Agency: Building Department, Planning Department, Fire Department
Schedule: On-going

Program 4.B
The City shall develop a program which enhances opportunities for home ownership in single family and multi-family development by encouraging such development through the City's affordable housing program, coordination and cooperation with financial institutions and other entities including Habitat for Humanity and similar institutions.
Responsible Agency: Redevelopment Agency, Planning Department, Planning Commission, City Council
Schedule: 2002-03, On-going

Policy 5
The General Plan shall provide a more balanced mix of moderate and high income housing that addresses the City's potential to meet the needs of high-end residents within the corporate limits.

Program 5.A
The General Plan and its Land Use Map shall provide adequate lands designated for low density, high value development, including single family subdivisions on larger lots, estate residential development and lands for ranchette-type development.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: 2002-03, On-going

Policy 6
In redevelopment areas and other locations where integrated planning is possible the City shall encourage the thoughtful integration of high density residential development that can take advantage of close and pedestrian-accessible employment and commercial centers.

Program 6.A
The City shall require the preparation of Specific/Precise Plans in areas where the integration of a mix of land uses is desirable or is to be encouraged, and where development plans can integrate the Ahwahnee Principles to enhance land use efficiencies and quality of life.
Responsible Agency: Planning Department, Redevelopment Agency, Planning Commission, City Council
Schedule: On-going

Policy 7
Development densities set forth in the General Plan represent a range of development densities that may be approved by the City, based upon the carrying capacity of lands, the availability of services and infrastructure, and the compatibility of proposed development with existing land use.

Program 7.A
Development proposals shall be analysed by City staff to determine the appropriate density for each development, independent of the proposed development density. Criteria to be considered shall include land carrying capacity, the quality of proposed development, the availability of services and infrastructure, the compatibility of proposed development with existing land uses, and other appropriate criteria.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

Policy 8
The City shall encourage the use of Specific Plans to master plan complex mixes of land uses, to assure the appropriate mix and distribution of uses, support facilities and open space areas, and for projects which have environmental or geophysical issues associated with them.

Policy 9
All residential development shall be subject to review by the City Architectural Review Committee and/or the City Planning staff for compliance with City architectural standards and guidelines.

Program 9.A
Residential subdivision applications, which include models of residential product to be developed, shall be reviewed and approved by the Architectural Review Committee. All other residential development applications shall be reviewed by Planning staff for compliance with applicable architectural design standards and guidelines.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

COMMERCIAL LAND USE BACKGROUND

Since its incorporation, Cathedral City has emerged as a significant player in commercial activity and retail development. As an essential part of the City's mix of land uses and the local economic base, commercial lands and development generate important tax revenues and employment opportunities. The City's success is due in part to its central location and excellent

access from major intra-regional arterial roadways. Increasing household incomes, both in Cathedral City and surrounding communities, are also enhancing the City's retail environment and creating new or expanded commercial markets in such areas as entertainment retailing, dining, and specialty and niche shopping.

With the development of additional neighborhood and community-scale commercial centers, the City has significantly strengthened its commercial position in the growing Coachella Valley market. This growth has included such "big box" retailers as Sam's Club and Wal-Mart, which have also supported a wide range of smaller, service commercial outlets. The City's very successful Auto Mall on East Palm Canyon has become an important economic engine that provides substantial retail sales tax revenues, but has also given support to a wide range of auto-related service commercial ventures in the City.

The latest block in building the City's commercial and economic foundation has been the implementation of the Downtown Precise Plan, which is revitalizing the downtown core area along the East Palm Canyon Drive corridor. New development stimulated by the civic center complex, IMAX Theater and Mary Pickford Theaters are providing the foundation for growth in local-serving and tourist commercial development, as well as mixed use residential and hotel projects. The City's growth in taxable sales, from about $399 million in 1995 to almost $610 million in 1999, is testament to the effective effort the City continues to make in building an economically vital community.

COMMERCIAL GOALS, POLICIES AND PROGRAMS

Goal

A balanced mix of commercial lands and services serving neighborhood, community, regional and visitor needs of all sectors of the community, which are appropriately distributed to take advantage of pedestrian and vehicle access, as well as the City's comparative advantages.

Policy 1
Assure that neighborhood-serving commercial development is strategically sited to maximize pedestrian access and minimize the need for vehicle travel to meet the daily shopping needs of the City's residents.

Program 1.A
The City shall encourage the development of integrated neighborhoods that include residential and neighborhood-serving commercial in a convenient and compatible manner, consistent with appropriate development standards set forth in the City Zoning/Development Code.
Responsible Agency: Planning Department, Economic Development Department, Redevelopment Agency, Planning Commission, City Council
Schedule: On-going

Policy 2
Major community and regional commercial development shall be located where it can take advantage of major roadways and highways, such as Interstate-10 and East Palm Canyon Drive, maximizing the drive-by market along such arterials and minimizing impacts on residential neighborhoods.

Policy 3
Through implementation of the General Plan and by other means, the City shall enhance opportunities for the development of additional tourist/visitor-oriented commercial development, including business and resort hotels, theaters, golf courses and other recreational facilities.

Policy 4
Planning and capital improvement projects shall be developed to improve and enhance access, safety and appearance of Ramon Road and other commercial corridors, as a major service and neighborhood commercial area of the City serving a wide range of consumers.

Program 4.A
The City shall initiate a corridor improvement program through the holding of public workshops and the development of corridor improvement plans that address the full range of traffic, pedestrian access and safety, and appearance issues on major commercial corridors. A program of staged improvements shall be developed and implemented to optimize these important commercial corridors.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

Policy 5
The City General Plan and Zoning Ordinance/Development Code shall establish policies, programs and development standards that limit future strip commercial development and enhance the function and appearance of existing strip centers.

Program 5.A
The City Zoning Ordinance/Development Code shall be reviewed and, as appropriate, revised to assure that development standards and guidelines address the development issues inherent in strip commercial development, including but not limited to site constraints, building heights, access onto arterial streets and compatibility with surrounding land uses.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: 2002-03

Policy 6
The City shall encourage lot consolidation and the submission and processing of integrated development plans along major arterials and other roadways where strip commercial will be developed, including the Golden Mile (Date Palm Drive) and other locations.

INDUSTRIAL LAND USE BACKGROUND

Industrial development in the City is currently (2002) limited, and opportunities for expansion of industrial land uses are defined by substantial existing development and limited opportunities for properly sited industrial uses. The Land Use Element and map address the need for additional industrial lands by taking advantage of existing physical constraints and opportunities, including the proximity of the US Interstate-10/Union Pacific Railroad transportation corridor. Other lands assigned industrial uses include those adjoining the Edom Hill Landfill and lands within the wind/blowsand belt north of I-10. The Plan also designates lands located near the cemetery for business park development.

The Land Use Element provides two industrial categories, a general "Industrial" designation and a "Business Park" designation. As discussed above, the Industrial land use category provides for a wide range of uses that are expected to be readily permissible with the caveat that they do not generate meaningful environmental impacts and operate entirely in enclosed buildings. The designation also provides for "discretionary" types of uses, the suitability of which will be determined on a case-by-case basis. Alternative energy projects and associated manufacturing development are also important opportunities the City may wish to consider in these areas.

The Business Park designation is meant to provide for a wide variety of mutually compatible uses, ranging from light industrial to professional office development. Land uses under this designation are expected to be compatible with neighboring residential and commercial uses. Other potentially appropriate office uses include administrative, corporate, institutional, legal, medical, financial, insurance, real estate, and government uses. Limited and primarily business-park-serving commercial, including restaurants, printing and copying services, are also expected to be compatible within this environment.

INDUSTRIAL GOALS, POLICIES AND PROGRAMS

Goal

A mix of business park and industrial uses and lands that are clean and non-polluting, can be developed in a manner compatible with non-industrial uses, and which enhance the mix of employment opportunities in the community and broaden the economic base of the City.

Policy 1

Protect and enhance the broadly-based business park nature of industrial development in the Perez Road corridor and other industrial areas of the City by preventing the development of particularly sensitive or otherwise incompatible land uses in the vicinity.

Policy 2

Recognize and preserve appropriate lands north of Interstate-10 for future business park and industrial development by precluding land uses that are inconsistent or incompatible with physical constraints of the area, and which may create land use compatibility issues with business park/industrial development.

Policy 3
Limit business park and industrial development to those uses which complement the overall economic development goals of the community by enhancing the type and value of new jobs for the community, while assuring that the City's high environmental quality standards are not compromised.

Program 3.A
The City shall develop and initiate a program of business park and industrial recruitment, which focuses on users with moderate to high employment potential and salaries that provide a standard of living consistent with the City's economic development goals.
Responsible Agency: Economic Development Department, Planning Department, Planning Commission, City Council
Schedule: On-going

Program 3.B
Business park and industrial development proposals shall be carefully reviewed in the course of conducting the CEQA Initial Study and through subsequent analysis, as necessary, to assure that the proposed land use(s) will not contribute to the degradation of the community's air, water or other environmental resource, including the City's aesthetic values.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

Policy 4
The City shall encourage the preparation of Specific/Precise Plans for major business park and industrial developments on 10 acres or more, to assure the efficient use of these lands and the roadways and rail service, drainage facilities and utilities to serve these developments.

Program 4.A
As a means of properly controlling and optimizing the development of business parks and industrial projects, the City may require the preparation of Specific/Precise Plans, which address circulation, infrastructure, drainage and development standards and guidelines to assure compatible development that reflects the values and standards set forth in the General Plan.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

Policy 5
All proposals for development of business and/or industrial parks shall be considered within the context of the City's aesthetic and health and safety concerns and goals.

Program 5.A
Business park and/or industrial park development shall be required to demonstrate a thoughtful consideration for surrounding land uses and the appearance of these developments from adjoining lands and public rights of way by integrating extensive landscaping, walls and other appropriate visual enhancements and screening.
Responsible Agency: Planning Department, Police Department, Fire Department, Riverside County Environmental Health, Planning Commission, City Council
Schedule: On-going

Program 5.B
Industrial and business park development proposals shall be reviewed with a special consideration for their potential to generate public health or safety issues. The issues shall be taken into consideration when assessing the appropriateness of proposed development sites and surrounding existing and planned land uses.
Responsible Agency: Planning Department, Police Department, Fire Department, Riverside County Environmental Health, Planning Commission, City Council
Schedule: On-going

MUNICIPAL FACILITIES AND SERVICES BACKGROUND

The provision of adequate levels of public facilities and services is one of the principal concerns of local government. Land uses for public facilities and services include such governmental functions as the Civic Center, fire and police stations, and the City's corporate yard. Other public and quasi-public services and facilities include those associated with schools and libraries, hospitals and other medical facilities, and utility infrastructure. (Also please see the Public Facilities and Services Element).

The level of public services and facilities needed to support residential, commercial and industrial development, and community needs in general, is directly related to the intensity of development and the socio-economic structure of the community. The planned logical extension of the City's urbanizing areas cannot occur without the careful and timely planning for and coordination of the extension of public services and facilities.

The viability and nurturing of the development environment, and the economic life and future of the City, are directly tied to the level and cost of services and facilities, the types and intensity of land use, and the level of demand generated for public services and facilities. The economic health of the City is also dependent upon a balance between service costs and revenues generated by current and future development.

While the extension of many urban services and facilities is provided by various public agencies and regulated private companies, some of these service providers are not under the City's regulatory jurisdiction. Nonetheless, the City has the essential responsibility to cooperate with the appropriate agencies, public districts and private companies, to facilitate the timely availability of services, but to also assure that premature and inappropriate land uses are not encouraged.

MUNICIPAL FACILITIES AND SERVICES GOALS, POLICIES AND PROGRAMS

Goal 1

Municipal services and facilities that are of adequate capacity and sufficiently well served and staffed to meet the service and safety needs of all sectors of the community now and in the future, while being compatible with the full range of community land uses.

Goal 2

Municipal services and facilities that are consistent with and facilitate the goals of the Ahwahnee Principles through the provision of convenient access to public transit, provide convenient and cost-effective water and wastewater treatment facilities, other infrastructure, and public safety services and facilities.

Policy 1
Assure the planning, development and provision of public facilities and services through City programs and requirements placed on development, which results in adequate levels of service and staffing requirements, while continuing to be compatible with surrounding land uses.

Policy 2
All proposals and plans for development of public buildings shall be assessed and approved through the same review process established for private sector development. The review process shall assure project compliance with City land use regulatory documents, compatibility with surrounding land use, and adherence to applicable design standards and guidelines.

Policy 3
The City shall pro-actively cooperate and coordinate with all providers of utility and public safety services in the community.

Program 3.A
Establish and/or maintain protocol and procedures to consult, coordinate and cooperate with providers responsible for public utilities, police, fire, health, and other service, protection and care services in the community.
Responsible Agency: Planning Department, Building Department
Schedule: Ongoing

OPEN SPACE AND CONSERVATION BACKGROUND

The City and the Coachella valley are host to a wide variety of open space and conservation lands and resources, which are important assets for all of the valley's communities. The open space and conservation spaces in the City are important areas of aesthetic, recreational and natural resource value, which also give the community its essential character.

Open space and conservation areas within the City and planning area include rugged and imposing elevated terrain of the foothills and mountains, major drainages and waterways, and lands serving as utility corridors.

These lands are also designated for the preservation of natural resources (plant and animal communities), washes and their banks, mineral deposits, parks and recreation facilities, multi-use trails, and areas where the presence of hazardous conditions limits or precludes development.

Parks and Public Open Space lands include special, important or valuable natural resources, which warrant protection. Open Space-Private designations may be assigned to private open space areas which are preserved for this use. Open Space–Other lands define a variety of open spaces and special resource areas, or those that may pose threats or hazards to development, and Open Space-Watercourse lands delineate floodways, including natural and man-made floodway and drainage channels.

OPEN SPACE AND CONSERVATION GOALS, POLICIES AND PROGRAMS

Goal 1

Environmental resources that are protected through the establishment and preservation of open space areas, which also protect residents and property from environmental hazards while providing recreational opportunities and enhancing the beauty and attraction of the community.

Goal 2

Preservation and enhancement of the City as a balanced mix of built and natural environments that contribute to the overall quality of life for its citizens and visitors, while preserving scenic resources of the desert and mountains.

Policy 1
The General Plan and supporting documents shall provide comprehensive descriptions and mapping of open space and conservation areas that are valued for their community-wide asset value, and/or are identified as areas constituting environmental hazards such as flood plains, high voltage electric transmission corridors, earthquake fault zones and blowsand hazard areas.

Policy 2
All development proposals shall be reviewed for the degree or extent to which they encroach upon sensitive resource areas or may subject people and/or improvements to damage from environmental hazards. Mitigation measures shall be promulgated, to the extent practical, to avoid significant impacts and determine the feasibility of development proposals.

Policy 3
The City shall explore and exploit all legitimate and appropriate opportunities to secure and protect valuable open space and conservation lands for the benefit of the entire community.

Program 3.A
Through all available contacts and opportunities, including those associated with the granting of development permits, the City shall provide opportunities and mechanisms for public and/or private donations of open space lands to the City or appropriate conservation land management entity for the benefit of its residents and the entire community.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

CIRCULATION ELEMENT

PURPOSE

The purpose of the Circulation Element is to provide goals, policies, programs and standards which correlate the City's transportation system with the types, intensities and locations of land uses within the City. It addresses those segments of the local transportation system that interface with and serve as extensions of the regional system connecting Cathedral City with the broader Coachella Valley and other communities in Southern California. The Circulation Element also serves as the blueprint for future land use policy decisions and social and economic development efforts.

BACKGROUND

The Circulation Element is an infrastructure plan that provides connectivity between the various existing and planned land uses of the City and addresses the dynamic access issues associated with the mix of residential, employment, commercial and institutional uses in the community. In addition to its effects on the physical, social and economic environment of the City, the Circulation Element also has a direct relationship with the Housing, Open Space, Noise and Air Quality elements. Being integrally tied to the Land Use Element, the Circulation Element is predictably influenced by the types, intensities and distribution of land uses within the community and surrounding area. Local and regional air quality issues are closely related to the efficiency of the local and regional transportation system. As the population in Cathedral City and the Coachella Valley continues to grow, vehicle miles will increase, and travel speeds will be reduced, resulting in higher emissions per mile traveled. The policies and programs established by the Circulation Element can play an important role in maintaining and enhancing the flow of traffic and preserving air quality in the community.

East Palm Canyon Improvements

The Circulation Element has been developed as a comprehensive transportation management strategy, in conjunction with the General Plan Program EIR and City Capital Improvement Plan. It sets forth specific goals, policies and programs, which are based upon an engineering and computer modeling analysis of existing and projected future traffic conditions.

Future traffic conditions have been forecasted utilizing the Coachella Valley Area Transportation System (CVATS) model, anticipated buildout land use patterns and intensities, projected regional growth expected to impact City streets and roadways, and a wide range of socioeconomic data and assumptions.

California Government Code sets forth the information and data analysis requirements of the Circulation Element. Government Code Section 65302 requires that the element describe major thoroughfares and that their planned development be closely coordinated with the Land Use Element of the General Plan.

It also requires that the element include development or improvement standards that are responsive to changes in demand for capacity created by implementation of the Plan. Government Code Sections 65103 (f) and 65080, et seq. require that the City coordinate Circulation Element provisions with applicable regional and state transportation plans. In the Cathedral City General Plan Planning Area, the following agencies are responsible for preparing these transportation plans: Coachella Valley Association of Governments (CVAG), Southern California Association of Governments (SCAG), and California Department of Transportation (CalTrans). The state is also required to coordinate its planning efforts with those of local jurisdictions (§65080(a)), with the federal government being under a similar mandate (§134, Title 23 of the U.S. Code).

INDICATORS OF ROADWAY EFFICIENCY

The efficient movement of vehicular traffic on local and regional roadways is critical to the normal day-to-day functioning of a community. Obstructions in traffic flow can have serious consequences, including economic loss due to delays in transporting goods, increased psychological stress for the traveling public, and increased risk for motor vehicle accidents. The efficiency of a particular roadway can be determined by assessing the roadway's capacity, level-of-service, and average daily traffic volume, each of which is described below.

Level-of-Service

Roadway capacity is defined as the number of vehicles that may pass over a section of roadway in a given time period under prevailing conditions. Roadway capacity is most restricted by intersection design and operation.

The capacity of a roadway and the degree to which that capacity is being utilized is typically described as the roadway's "Level-of-Service" (LOS). Level-of-Service is a qualitative measure of the efficiency of traffic flow and is defined by alphabetical connotations, ranging from "A" through "F," that characterize roadway operating conditions.

LOS A represents an optimum or free-flowing condition, and LOS F indicates extremely slow speeds and system failure. Levels-of-Service are represented as volume-to-capacity (V/C) ratios, or vehicle demand divided by roadway capacity. V/C ratios smaller than 1.00 imply better operational characteristics and levels-of-service. V/C ratios that exceed 1.00 imply worse operating conditions and LOS F, where traffic demand exceeds roadway capacity. The table below defines the various LOS classifications.

Table III-4
Roadway Level Of Service Description

Level of Service	Quality of Traffic Flow
A	Primarily free-flow operations at average travel speeds usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalised intersections is minimal.
B	Reasonably unimpeded operations at average travel speeds usually about 70% of the free-flow speed of the arterial classification. Ability to maneuver within the traffic stream is only slightly restricted. Stopped delays are not bothersome, and drivers generally are not subject to appreciable tension.
C	Traffic operations are stable. However, mid-block maneuverability may be more restricted than in LOS B. Longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50% of the average free-flow speed for the arterial classification. Motorists will experience some appreciable tension while driving.
D	Borders on a range where small increases in flow may cause substantial increases in approach delay and decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40% of the free-flow speed. For planning purposes, this level-of-serve is the lowest that is considered acceptable.
E	Characterized by significant approach delays and average travel speeds of one-third or less of the free-flow speed. Typically caused by some combination of adverse progression, high signal density (more than two signalised intersections per mile), high volumes, extensive queuing, delays at critical intersections, and/or inappropriate signal timing.
F	Arterial flow at extremely slow speeds, below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalised intersections, with high approach delays and extensive queuing. Adverse progression is frequently a contributor to this condition.

Source: p. 11-4, Highway Capacity Manual, Special Report 209, Transportation Research Board, 1994.

Traffic engineers and transportation planners are involved in on-going efforts to strike a balance between providing ideal roadway operating conditions and controlling the costs of infrastructure and right-of-way needed to assure those conditions. For General Plan purposes, the upper level of LOS D is assumed to be the "acceptable" level-of-service for a given roadway in the City. While the vast majority of roadways in the planning area are expected to operate at acceptable levels-of-service at General Plan buildout, several segments may operate at LOS E or F unless special design and/or control measures are implemented to mitigate traffic impacts in these areas.

Typically, capacity can be increased by adding travel or turning lanes, constructing raised medians, and/or restricting vehicle access to a roadway. By reducing the number of vehicle conflict points, traffic flow on a roadway can be substantially improved, avoiding the loss of capacity caused by disruptions to traffic flow resulting from vehicles entering or leaving the roadway (see Section III-B, General Plan Program EIR for more information about mitigating traffic impacts).

Average Daily Traffic Volumes

Average Daily Trips (ADT) is the total number of vehicles that travel a defined segment of roadway over a twenty-four hour period. ADT is a useful benchmark number for determining various roadway configurations and design aspects. The peak hour ADT, which is the highest volume of traffic to pass over a segment of roadway during an hour period, is also a useful means of determining a roadway's capacity and level-of-service. Traffic counts at intersections can provide an even more detailed picture of existing and future operating conditions at intersections.

Roadways are generally classified in a hierarchical manner, according to the number of vehicle lanes provided. Table III-5, below, lists the various roadway types/cross-sections found in the planning area and the maximum daily traffic volumes each type of roadway can accommodate at various levels-of-service. For example, for a Major Highway to operate at LOS C, it should accommodate no more than 24,000 vehicle trips per day. These roadway capacities are "rule-of-thumb" estimates, which may vary depending upon site-specific factors, such as the number and configurations of intersections, roadway grades, sight distance, percentage of truck and bus traffic, and degree of access control.

Table III-5
Level-of-Service Volumes/Capacity Values
For Various Roadway Classifications

Classification	Typical Lane Configuration	Average Daily Volume @ Upper Limit of Each LOS (Veh.s/Day)a Ac (60%)	Bc (70%)	Cb (80%)	Dc (90%)	Eb (100%)
Collector	2-Lane Undivided	6,000	9,000	12,000	15,000	18,000
Secondary Highway	4-Lane Undivided	10,000	15,000	20,000	25,000	30,000
Major Highway	4-Lane Divided	10,000	17,000	24,000	31,000	38,000
Arterial Highway	6-Lane Divided	17,000	27,500	38,000	48,500	59,000
Freeway	8-Lane Divided	74,000	103,000	132,000	161,000	190,000

a. The upper limit of LOS D was assumed as the "design" capacity for Cathedral City. All capacities are based upon improvements to full City standards under optimum operating conditions. Capacity can be significantly reduced by a high incidence of pedestrian traffic and turning movements. Substandard vertical and horizontal alignment, or any combination which might restrict sight distance will also reduce capacity.
b. Source: Riverside County Road Department, Information Pamphlet for Riverside County Traffic Circulation and Roadway Improvement Requirements, Revised 11/24/87.
c. Source: Endo Engineering, based upon LOS C and LOS E values provided by Riverside County.

CURRENT CONDITIONS

The City of Cathedral City and the communities of the Coachella Valley located south of US Interstate-10 have grown into a continuous and interconnected suburban development pattern, tied together by state and interstate highways and a network of arterial roadways. This interconnection has been further supported by the Mid-Valley Parkway, which provides an additional intercity link between local communities and economic markets. A variety of physical influences and constraints, including the geography of the City and valley, the constrained development pattern between U.S. Interstate-10 and the Santa Rosa Mountains, and the existing roadway network, affect traffic flows and the impacts of development on local roadways. The existing roadway network is further described in the General Plan EIR and its special traffic study.

Major Regional Roadways

Two regional routes provide primary access to the City: East Palm Canyon Drive (formerly State Highway 111) and U.S. Interstate-10. US Interstate-10 connects the Los Angeles region with Arizona and other cities and states to the east. East Palm Canyon Drive is designated as State Highway 111 at its junction with Interstate-10 several miles west of Palm Springs. As it enters Palm Springs, Highway 111 proceeds east along Vista Chino, then south along Gene Autry Trail, where it intersects and becomes East Palm Canyon Drive and proceeds east through Cathedral City.

East of Cathedral City, East Palm Canyon Drive is once again designated as "Highway 111," and it continues southeast to Brawley in the Imperial Valley. The Mid-Valley Parkway is an additional intra-regional arterial that extends from the Palm Springs International Airport entrance on Ramon Road, southeast to Cook Street. Each of these regional facilities is briefly described below.

U.S. Interstate-10

I-10 provides essential inter-city and inter-regional access and is a critical part of the local road network, moving people and goods into and out of the Valley. Where it passes through Cathedral City, U.S. Interstate-10 is built as an eight-lane divided freeway, which is accessed from a single diamond-shaped interchange at Date Palm Drive. Additional City access to I-10 is available through the Gene Autry Trail and Ramon Road interchanges to the west and east. The General Plan proposes and plans for the future construction of an additional interchange at the northerly extension of Da Vall Drive, approximately one mile east of the I-10/Date Palm Drive interchange.

East Palm Canyon Drive

East Palm Canyon Drive follows the approximate route of the Old Bradshaw Trail (see the Archaeological and Cultural Resources Element), which runs along the toe of the Santa Rosa Mountains and the Whitewater River. This roadway again becomes the state-classified Highway 111 at the City's easterly boundary with Rancho Mirage. Its classification notwithstanding, East Palm Canyon Drive is an important intra-regional connector serving local cities. Over the past several years, some through-traffic appears to have moved north to I-10 in response to congestion along this roadway.

East Palm Canyon Drive is an integral part of the Downtown Redevelopment Project and has been improved to enhance traffic flow and better serve the adjoining commercial and institutional land uses. Completed improvements extend from Cathedral Canyon Drive eastward to Date Palm Drive and include two through-lanes in each direction, raised and landscaped median islands, and parallel service or frontage roads that provide bus service parking and side-street access outside the main flow of traffic.

Mid-Valley Parkway

The Mid-Valley Parkway was originally conceived as an east-west, inter-city arterial that would serve as a high capacity linkage between Palm Springs and the various communities of the Coachella Valley, and as an alternate route to Highway 111/East Palm Canyon Drive. It was envisioned as a six-lane, high-speed, restricted access roadway, which would be located mid-way between Highway 111 and Interstate-10 and provide access to regional transportation hubs, including the Palm Springs International Airport.

Unfortunately, cost constraints and problems securing adequate right-of-way in adjoining cities have reduced the size of this arterial to four lanes, divided. Today, the parkway follows a circuitous route from Palm Springs to Rancho Mirage and provides only marginally better performance than other regional arterials.

The Mid-Valley Parkway's westerly terminus is Highway 111 in the San Gorgonio Pass, and its easterly terminus is Cook Street in Palm Desert. In Cathedral City, the Mid-Valley Parkway

extends east-west along Dinah Shore Drive. The addition of a bridge over the Whitewater River has reduced some of the traffic volume on nearby Ramon Road, however, development along much of this roadway limits its capacity through the City. It is unclear whether the Mid-Valley Parkway constitutes a meaningful change or addition to arterial facilities in the area, however, funding is available from CVAG to assist in completing its design, development and construction. The Transportation Uniform Mitigation Fee (TUMF) program has helped to pay for this facility and a wide range of other arterial roadways in the Coachella Valley.

Major Local Roadways

The City has facilitated the construction and maintenance of a variety of other major roadways of local importance, including Gerald Ford Drive, Ramon Road, Vista Chino, Date Palm Drive and Cathedral Canyon Drive. These roadways have been built along a north-south grid that interconnects with major arterials passing through adjacent jurisdictions. The convenience they provide in traversing through the City is of significant importance to residents and businesses alike.

A variety of traffic data was collected to evaluate existing traffic conditions in the planning area, including traffic counts and estimations from the City of Cathedral City, Coachella Valley Association of Governments (CVAG), CalTrans, and special site-specific traffic studies conducted for development projects in the planning area. The following table describes existing capacities, average traffic volumes, and levels-of-service for roadways in the General Plan planning area. Existing Average Daily Traffic (ADT) volumes are displayed graphically on Exhibit III-2, and street cross-sections are illustrated on Exhibit III-4.

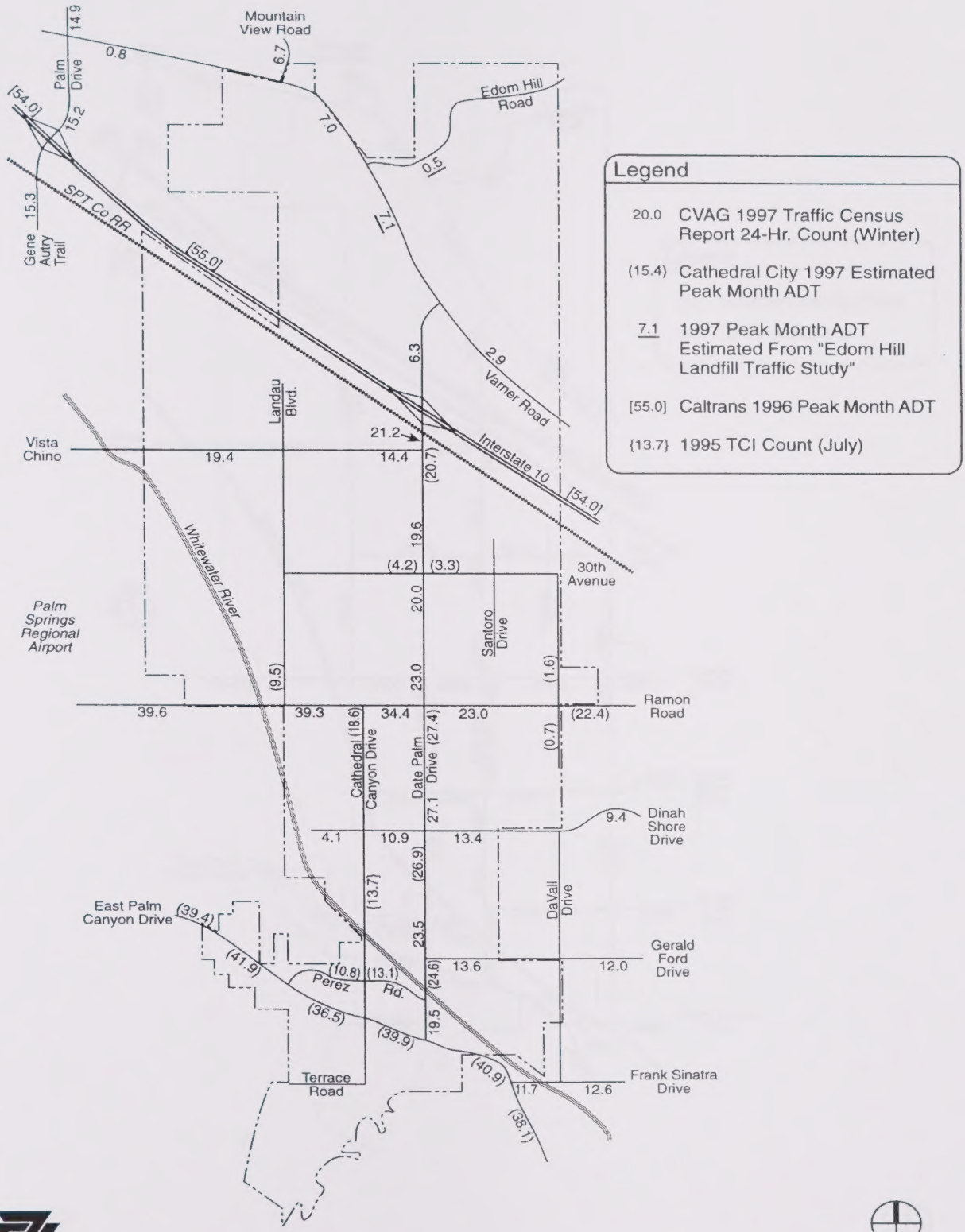
Table III-6
Existing Conditions Summary
for Major Roadways in the Planning Area

Roadway Link	Current ADT	Daily Capacitya (Veh./Day)	V/Cb Ratio	Level of Service
U.S Interstate-10				
W of Palm Drive	54,000	190,000	0.28	A
W of Date Palm Drive	55,000	190,000	0.29	A
E of Date Palm Drive	54,000	190,000	0.28	A
Gene Autry Trail/Palm Drive				
N of Varner Road	14,900	18,000	0.83	D
N of Interstate-10	15,200	18,000	0.84	E
S of Interstate-10	15,300	18,000	0.85	E
Mountain View Road				
N of Varner Road	6,700	18,000	0.37	B
Landau Boulevard				
N of Ramon Road	9,500	38,000	0.25	A
Cathedral Canyon Drive				
S of Ramon Road	18,600	38,000	0.49	C
S of Dinah Shore Drive	13,700	38,000	0.36	B
Date Palm Drive				
S of Varner Road	6,300	18,000	0.35	B
N of Vista Chino	21,200	38,000	0.56	C
S of Vista Chino	20,700	38,000	0.54	C
N of 30th Avenue	19,600	38,000	0.52	C
S of 30th Avenue	20,000	38,000	0.53	C
N of Ramon Road	23,000	59,000	0.39	B
S of Ramon Road	27,400	59,000	0.46	B
N of Dinah Shore Drive	27,100	59,000	0.46	B
S of Dinah Shore Drive	26,900	59,000	0.46	B
N of Gerald Ford Drive	23,500	38,000	0.62	C
N of Perez Road	24,600	38,000	0.65	D
N of East Palm Canyon Drive	19,500	38,000	0.51	C
Da Vall Drive				
N of Ramon Road	1,600	18,000	0.09	A
S of Ramon Road	700	38,000	0.02	A
Varner Road				
E of Palm Drive	800	18,000	0.04	A
E of Mountain View Road	7,000	18,000	0.39	B
E of Edom Hill Road	7,100	18,000	0.39	B
E of Date Palm Drive	2,900	18,000	0.16	A
Edom Hill Road				
E of Varner Road	500	18,000	0.03	A
Vista Chino				
W of Landau Boulevard	19,400	38,000	0.51	C
W of Date Palm Drive	14,400	38,000	0.38	B

Table III-6 (continued)
Existing Conditions On Major City Roadways

Roadway Link	Current ADT	Daily Capacitya (Veh./Day)	V/Cb Ratio	Level of Service
30th Avenue				
W of Date Palm Drive	4,200	18,000	0.23	A
E of Date Palm Drive	3,300	18,000	0.18	A
Ramon Road				
W of Landau Boulevard	39,600	38,000	1.04	F
W of Cathedral Canyon Drive	39,300	59,000	0.67	D
W of Date Palm Drive	34,400	59,000	0.58	C
E of Date Palm Drive	23,000	38,000	0.61	C
E of Da Vall Drive	22,400	38,000	0.59	C
Dinah Shore Drive				
W of Cathedral Canyon Drive	4,100	38,000	0.11	A
W of Date Palm Drive	10,900	38,000	0.29	B
E of Date Palm Drive	13,400	38,000	0.35	B
E of Da Vall Drive	9,400	18,000	0.52	C
Gerald Ford Drive				
E of Date Palm Drive	13,600	30,000	0.45	B
E of Da Vall Drive	12,000	38,000	0.32	B
Perez Road				
W of Cathedral Canyon Drive	10,800	30,000	0.36	B
W of Date Palm Drive	13,100	38,000	0.34	B
East Palm Canyon Drive				
W of City Limits	39,400	38,000	1.04	F
W of Perez Road	41,900	38,000	1.10	F
W of Cathedral Canyon Drive	36,500	38,000	0.96	E
W of Date Palm Drive	39,900	38,000	1.05	F
W of Frank Sinatra Drive	40,900	59,000	0.69	D
E of Frank Sinatra Drive	38,100	59,000	0.65	D
Frank Sinatra Drive				
E of East Palm Canyon Drive	11,700	38,000	0.31	B
E of Da Vall Drive	12,600	38,000	0.33	B

a These values represent the current "physical" capacity at the upper limit of LOS E, as shown in the table entitled "Level-of-Service Volumes/Capacity Values for Various Roadway Classifications."
b These values were calculated using the "physical" capacity at the upper limit of LOS E.
Source: Table 3-6, "Cathedral City General Plan Update, Traffic Background Study," Endo Engineering, January 2002.

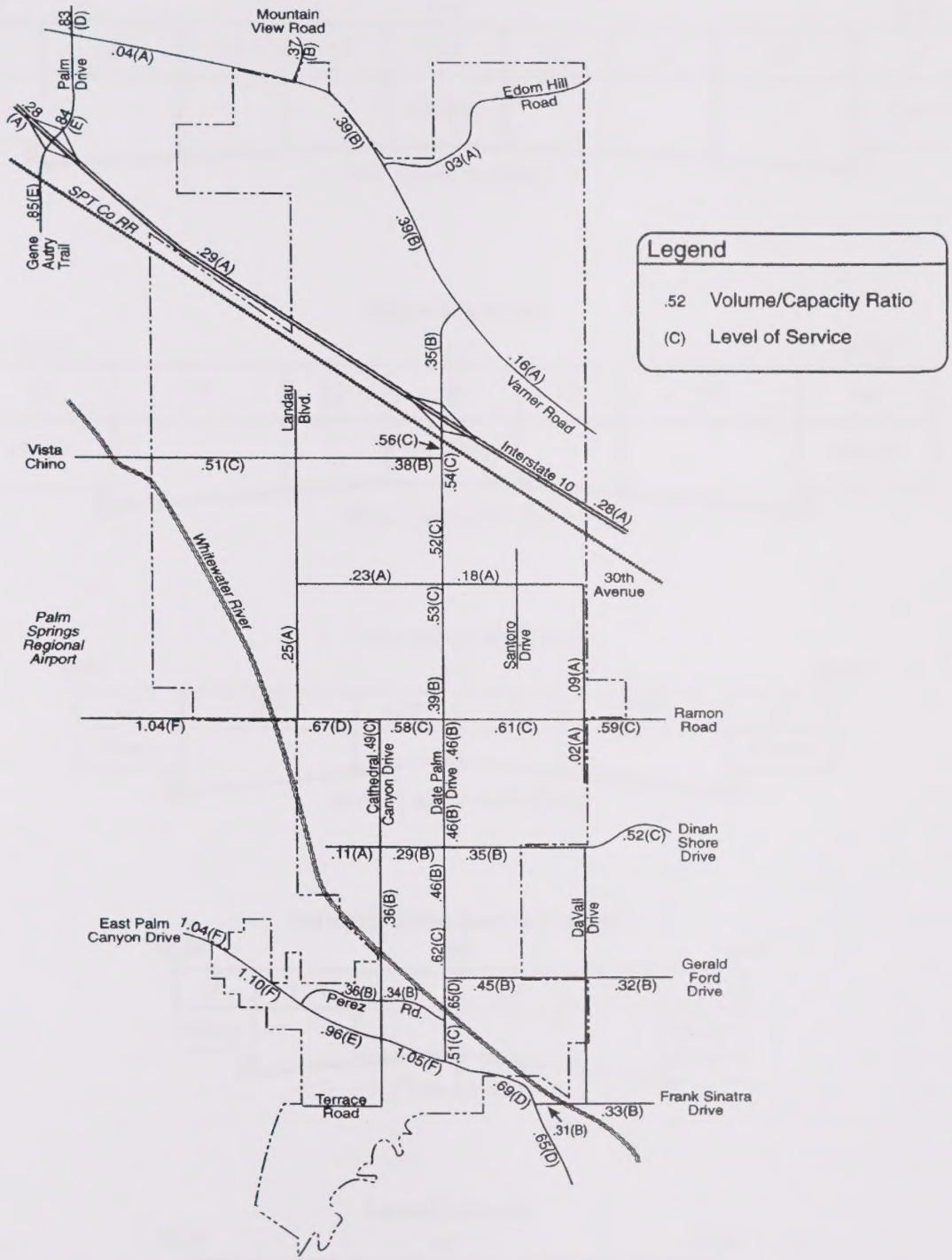


TERRA NOVA®
Planning & Research, Inc.

City of Cathedral City
General Plan
Existing Daily Traffic Volumes

Cathedral City

Exhibit
III-2



TERRA NOVA®
Planning & Research, Inc.

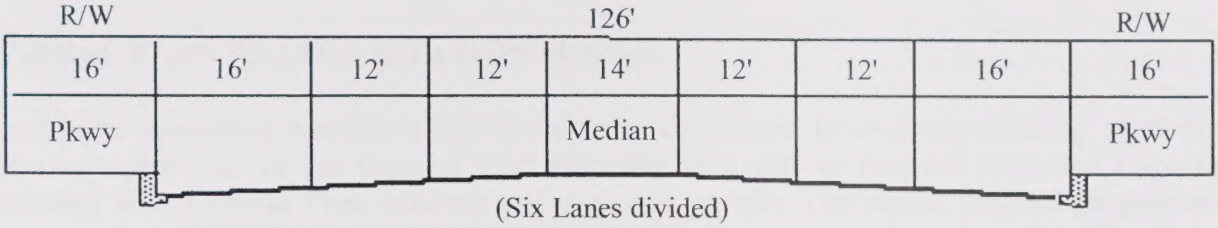
City of Cathedral City
General Plan
Existing Daily Volume/Capacity
& Level of Service

Cathedral City

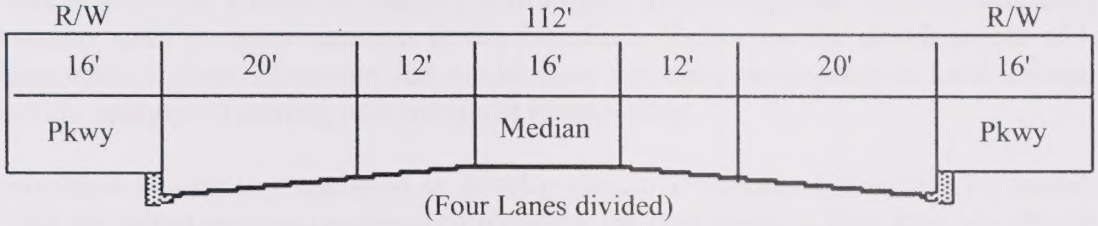
Exhibit

III-3

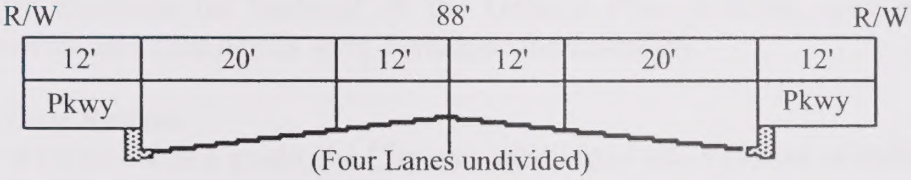
Arterial Highway



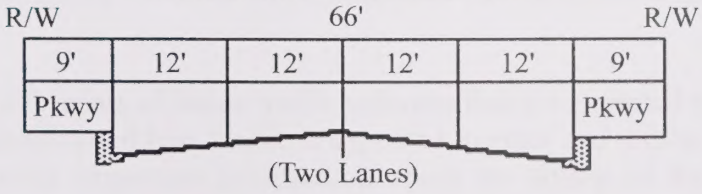
Major Highway



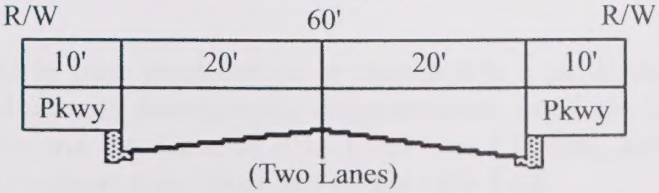
Secondary Highway



Industrial/Residential Collector



Local Collector



GENERAL PLAN TRANSPORTATION MODEL

A computer-generated transportation model was developed to evaluate existing roadway operating conditions in the General Plan planning area and to forecast projected impacts associated with General Plan buildout and regional growth. The model utilized geographic information system (GIS) mapping of the entire planning area and was based upon the Coachella Valley Area Transportation Study (CVATS) model, which was developed by the Southern California Association of Governments, in conjunction with the Coachella Valley Association of Governments (CVAG) and the Riverside County Transportation Commission (RCTC). The CVATS model provides a level of analysis appropriate for sub-regional and regional analysis, and is currently used by most agencies in the Coachella Valley for the development of long-range transportation plans. However, the model does not evaluate impacts to local streets, nor does it provide analysis of turning movements at intersections.

Using procedures similar to those used to develop the 2010 version of the CVATS model, the General Plan modeling process consisted of mapping the new General Plan land use allocations and overlaying them with a variety of socio-economic data and the existing and planned roadway network of the planning area. Attributes and characteristics of the model were refined to better replicate local land use conditions and travel characteristics, and to produce accurate and reasonable traffic forecasts for buildout of the General Plan planning area. Additional transportation network and zone details were developed for this effort.

CVATS-Based Zone System

Utilizing the CVATS model as a guide, the City was subdivided into a system of traffic analysis zones (TAZs). The City's 1998 land use patterns were used to determine where CVATS TAZs needed to be further subdivided, making provisions for approved but as yet completed master planned communities. New General Plan land use allocations were evaluated, and based on this distribution of land uses, traffic volumes were generated and distributed along the roadways within each TAZ.

This process resulted in a forecast of future traffic volumes that are expected to occur at General Plan buildout, and it approximated how traffic is expected to enter and utilize the local roadway system. The results provide important information about the ability of the current roadway system to maintain acceptable traffic flows in the future. (Please see the technical appendices of General Plan EIR for an illustration of TAZ boundaries and a breakdown of the various land uses within each TAZ).

Trip Generation

The total number of vehicle trips produced in or attracted to a particular geographic area is directly related to its land use and demographic characteristics. Land use data, as designated by existing land use patterns and the General Plan Land Use Element, served as the basis for determining the number of vehicle trips generated within each TAZ.

The CVATS model was used to determine the average number of daily trips for each land use, and this data was modified for City-specific application. The General Plan transportation model then estimated the number of peak season vehicle trips expected to be produced on an average weekday within each TAZ.

Trip Distribution and Traffic Assignment

The next step in the modeling process was to directionally distribute the vehicle trips produced in or attracted to each TAZ and assign them to specific streets. The transportation analysis uses a "gravity distribution model," which assumes that the distribution of vehicle trips is proportional to the "attractiveness" of the land use and the distance (or travel time) from the point of trip production. Each type of trip or trip purpose has its own specific travel characteristics.

The model then assigned vehicle trips to specific route paths based upon the interchanges of traffic between TAZs identified in the trip distribution process. The result is a forecast of daily traffic volumes at General Plan buildout, with the assignment of vehicle trips to specific roadways within the planning area. As with other aspects of the General Plan modeling effort, traffic assignments have been adapted from procedures used in the CVATS model.

GENERAL PLAN BUILDOUT

Trip Generation

The number of trips generated at buildout of the planning area is based on the land use types and intensities assigned by the General Plan Land Use Plan. The transportation model estimates the average number of peak season vehicle trips that will be produced on a weekday for each TAZ, and gives special consideration to seasonal peak trips to address the increased travel demand that occurs when visitors and seasonal residents utilize the City roadway network. Based on the land use types and intensities established by the Land Use Plan, buildout of the General Plan planning area is expected to generate a total of approximately 992,862 daily two-way trips.

Levels-of-Service

Buildout of the General Plan is expected to provide LOS D or better operations on a daily basis for most (81%) roadway segments in the planning area. However, thirteen segments (15%) are expected to operate at LOS E, and four (4%) are expected to operate at LOS F. Typically, impacts to roadway links that are projected to operate at LOS E on a daily basis can be adequately mitigated by providing additional turning lanes at intersections. Where roadway links are projected to operate at LOS F, the construction of additional through lanes is usually required to adequately reduce delays or provide alternative parallel routes.

The preservation of adequate right-of-way at major intersections is critical to improving conditions on roadways projected to function at LOS E and F, in order to allow space for future intersection improvements. Areas where future impacts remain unacceptable will require more detailed and focused analysis to alleviate anticipated impacts. These areas are addressed in subsequent sections of this element.

Anticipated average daily traffic (ADT) volumes and levels-of-service (LOS) for major roadway segments in the planning area are described in the following table. Daily traffic volumes are illustrated graphically in Exhibit III-5.

Table III-7
General Plan Buildout Traffic Impact Analysis

Roadway Link	Buildout ADT	Daily Capacitya (Veh./Day)	V/Cb Ratio	Level of Service
Interstate-10				
W of Date Palm Drive	140,200	190,000	0.74	D
E of Date Palm Drive	158,800	190,000	0.84	D
Palm Drive				
S of Date Palm Drive	71,900	59,000	1.22	F
Mountain View Road				
N of Date Palm Drive	31,500	59,000	0.53	C
Edom Hill Road				
E of Date Palm Drive	4,900	30,000	0.16	A
Varner Road				
E of Date Palm Drive	12,900	38,000	0.34	B
W of Da Vall Drive	11,600	38,000	0.31	B
E of Da Vall Drive	21,200	38,000	0.56	C
Valley Center Boulevard				
E of Palm Drive	18,400	38,000	0.48	C
W of City Limit	19,000	38,000	0.50	C
W of Date Palm Drive	32,300	38,000	0.85	E
E of Date Palm Drive	25,900	38,000	0.68	D
W of Da Vall Drive	30,000	38,000	0.79	D
Date Palm Drive				
E of Palm Drive	19,200	59,000	0.33	B
E of Mountain View Road	47,100	59,000	0.80	D
E of Edom Hill Road	42,900	59,000	0.73	D
S of Varner Road	39,200	59,000	0.66	D
S of Valley Center Boulevard	55,900	59,000	0.95	E
N of Vista Chino	79,500	59,000	1.35	F
S of Vista Chino	40,600	59,000	0.69	D
N of 30th Avenue	39,500	59,000	0.67	D
S of 30th Avenue	33,500	59,000	0.57	C
N of Ramon Road	33,800	59,000	0.57	C
S of Ramon Road	33,600	59,000	0.57	C
N of Dinah Shore Drive	32,800	59,000	0.56	C
S of Dinah Shore Drive	37,200	59,000	0.63	C
N of Gerald Ford Drive	33,300	59,000	0.56	C
N of Perez Road	39,800	59,000	0.67	D
S of Perez Road	33,000	59,000	0.56	C
N of East Palm Canyon Drive	33,000	59,000	0.56	C
S of East Palm Canyon Drive	14,000	18,000	0.78	D

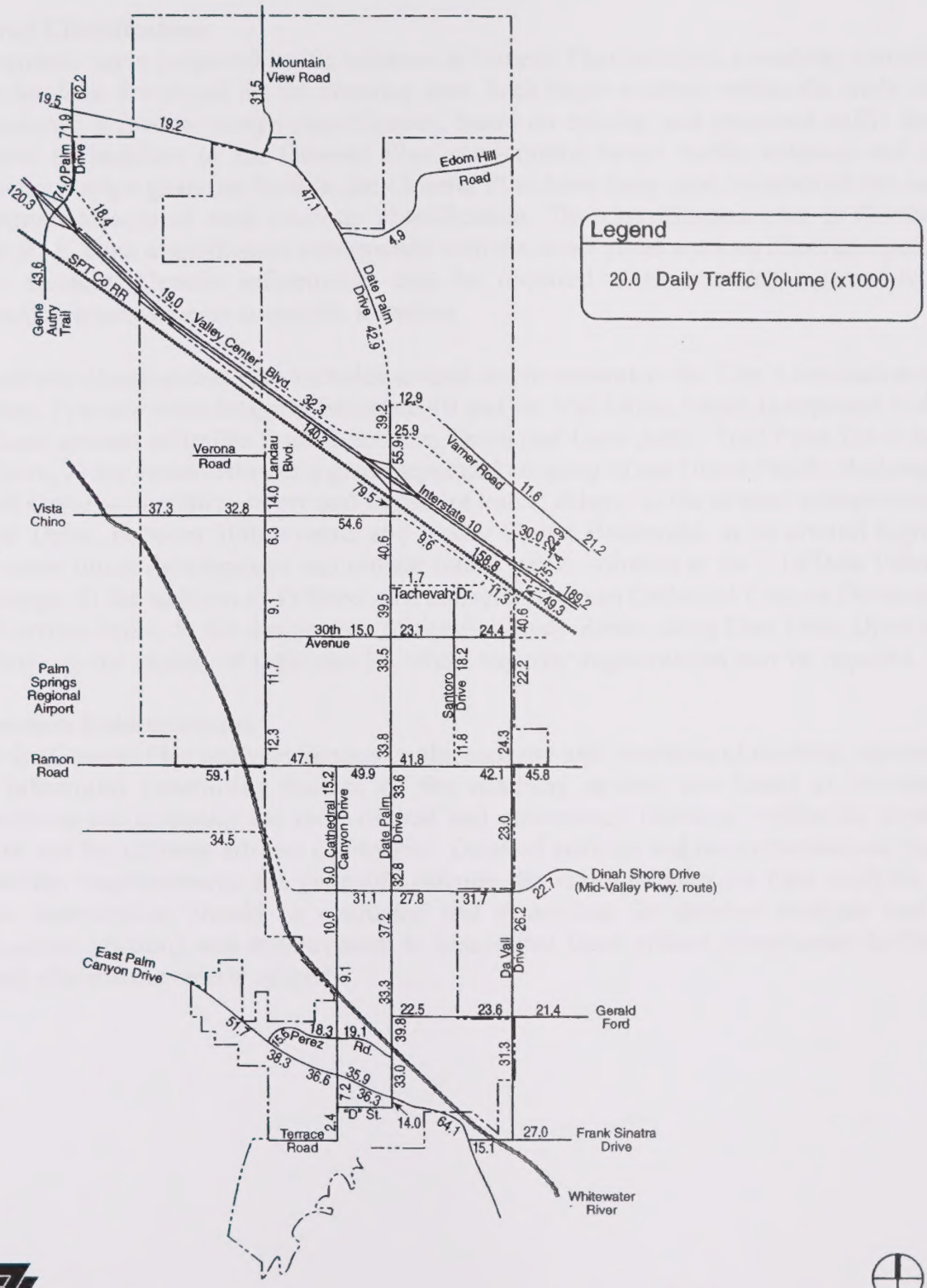
Table III-7 (continued)
General Plan Buildout Traffic Impact Analysis

Roadway Link	Buildout ADT	Daily Capacitya (Veh./Day)	V/Cb Ratio	Level of Service
Da Vall Drive				
S of Varner Road	22,900	38,000	0.60	C
N of Interstate-10	51,400	59,000	0.87	E
S of Interstate-10	49,300	59,000	0.84	E
N of 30th Avenue	40,600	59,000	0.69	D
S of 30th Avenue	22,200	38,000	0.58	C
N of Ramon Road	24,300	38,000	0.64	D
S of Ramon Road	23,000	38,000	0.61	C
S of Dinah Shore Drive	26,200	38,000	0.69	D
S of Gerald Ford Drive	31,300	38,000	0.82	E
Vista Chino				
E of City Limit	37,300	59,000	0.63	C
W of Landau Boulevard	32,800	59,000	0.56	C
W of Date Palm Drive	54,600	59,000	0.93	E
E of Date Palm Drive	9,600	38,000	0.25	A
W of Da Vall Drive	11,300	38,000	0.30	B
30th Avenue				
W of Date Palm Drive	15,000	30,000	0.50	B
E of Date Palm Drive	23,100	30,000	0.77	D
W of Da Vall Drive	24,400	30,000	0.81	D
Ramon Road				
W of Landau Boulevard	59,100	59,000	1.00	F
W of Cathedral Canyon Drive	47,100	59,000	0.80	D
W of Date Palm Drive	49,900	59,000	0.85	E
E of Date Palm Drive	41,800	59,000	0.71	D
W of Da Vall Drive	42,100	59,000	0.71	D
E of Da Vall Drive	45,800	59,000	0.78	D
Tachevah Drive				
E of Date Palm Drive	1,700	30,000	0.06	A
E of Santoro Drive	1,700	30,000	0.06	A
Santoro Drive				
S of 30th Avenue	18,200	30,000	0.61	C
N of Ramon Road	11,800	30,000	0.39	B
Landau Boulevard				
N of Vista Chino	14,000	38,000	0.37	B
S of Vista Chino	6,300	38,000	0.17	A
N of 30th Avenue	9,100	38,000	0.24	A
S of 30th Avenue	11,700	38,000	0.31	B
N of Ramon Road	12,300	38,000	0.32	B

Table III-7 (continued)
General Plan Buildout Traffic Impact Analysis

Roadway Link	Buildout ADT	Daily Capacitya (Veh./Day)	V/Cb Ratio	Level of Service
Cathedral Canyon Drive				
S of Ramon Road	15,200	30,000	0.51	C
N of Dinah Shore Drive	9,000	30,000	0.30	A
S of Dinah Shore Drive	10,600	30,000	0.35	B
N of Perez Road	9,100	30,000	0.30	A
S of East Palm Canyon Drive	7,200	30,000	0.24	A
Dinah Shore Drive				
W of Cathedral Canyon Drive	34,500	38,000	0.91	E
W of Date Palm Drive	31,100	38,000	0.82	E
E of Date Palm Drive	27,800	38,000	0.73	D
W of Da Vall Drive	31,800	38,000	0.84	E
E of Da Vall Drive	22,700	38,000	0.60	C
Gerald Ford Drive				
E of Date Palm Drive	22,500	38,000	0.59	C
W of Da Vall Drive	23,600	38,000	0.62	C
E of Da Vall Drive	21,400	38,000	0.56	C
Perez Road				
N of East Palm Canyon Drive	15,600	38,000	0.44	B
W of Cathedral Canyon Drive	18,300	38,000	0.48	C
W of Date Palm Drive	19,100	38,000	0.50	C
East Palm Canyon Drive				
W of Perez Road	51,700	59,000	0.88	E
E of Perez Road	38,300	59,000	0.65	D
W of Cathedral Canyon Drive	36,600	59,000	0.62	C
E of Cathedral Canyon Drive	35,900	38,000	0.94	E
W of Date Palm Drive	36,300	38,000	0.96	E
E of Date Palm Drive	64,100	59,000	1.09	F
D Street				
E of Cathedral Canyon Drive	6,700	18,000	0.37	B
W of Date Palm Drive	9,100	18,000	0.51	C
Frank Sinatra Drive				
E of East Palm Canyon Drive	15,100	38,000	0.40	B
E of Da Vall Drive	27,000	38,000	0.71	D

a These values represent the master planned capacity (upper limit of LOS E) shown in the table entitled "Level-of-Service Volumes/Capacity Values for Various Roadway Classifications."
b These values were calculated using the capacity at the upper limit of LOS E.
Source: Table 4-1, "Cathedral City General Plan Update, Traffic Background Study," Endo Engineering, January 2002.



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City of Cathedral City
General Plan
Buildout ADT

Cathedral City

Exhibit
III-5

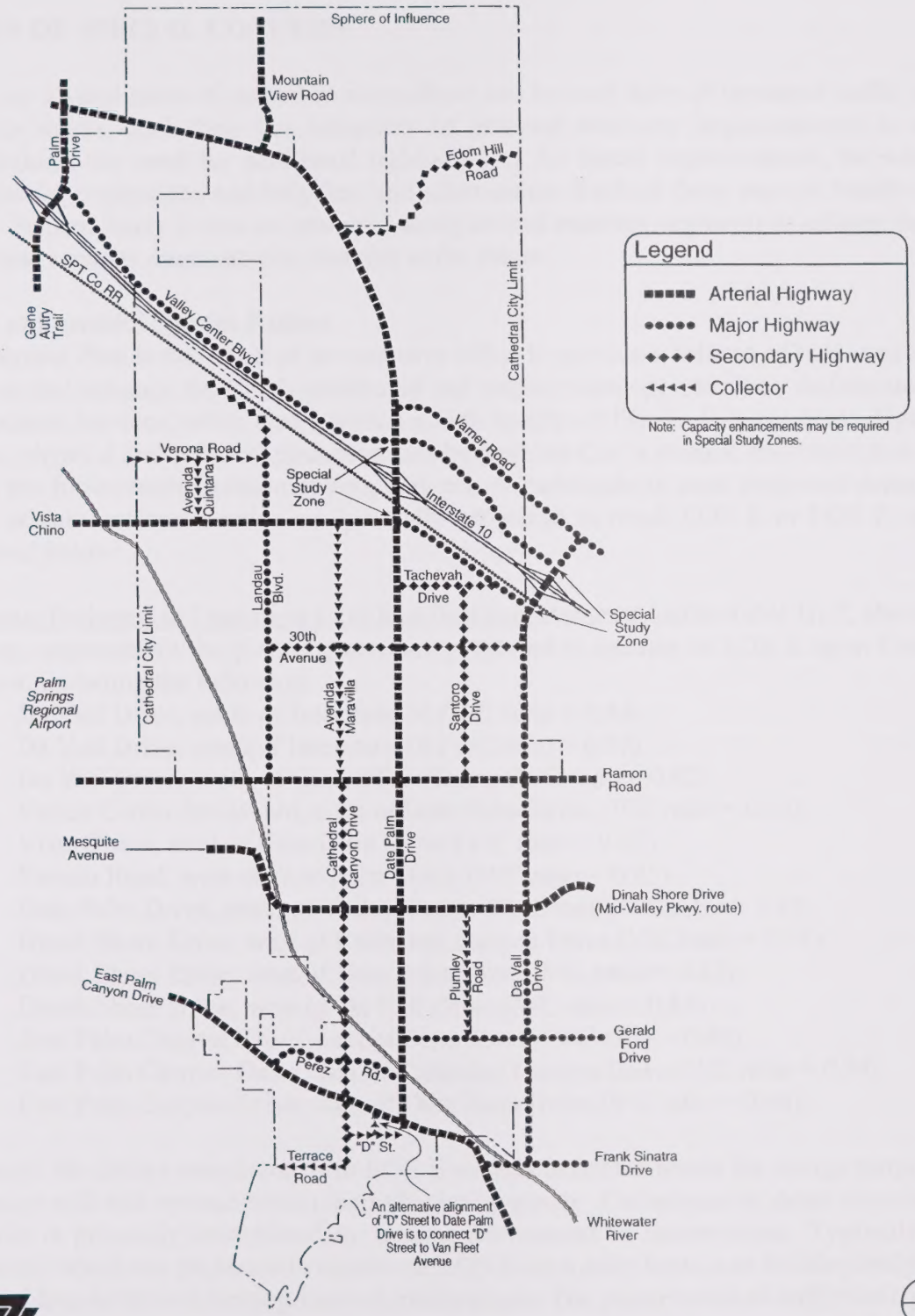
Roadway Classifications

To adequately serve projected traffic volumes at General Plan buildout, a roadway classification system has been developed for the planning area. Each major roadway within the study area has been assigned a specific design classification, based on existing and projected traffic demands generated by buildout of the General Plan. Anticipated future traffic volumes and overall community design goals set forth in the General Plan have been used to establish the need for and appropriateness of each roadway classification. The classification plan is illustrated in Exhibit III-6. Each classification corresponds with the street cross-sections illustrated previously in this element. Certain refinements may be required when securing right-of-way and constructing improvements at specific locations.

The roadway classification plan includes several improvements to the City's circulation system, including: 1) a new interchange at Interstate-10 and Da Vall Drive, which is expected to divert a significant amount of traffic from Date Palm Drive and Gene Autry Trail/Palm Drive onto Da Vall Drive, 2) the construction of a grade separated crossing of the Union Pacific Railroad along Da Vall Drive to maximize safety and minimize traffic delays, 3) the extension/improvement of Da Vall Drive, between 30th Avenue and Valley Center Boulevard, as an arterial highway to better serve future development and reduce future traffic volumes at the I-10/Date Palm Drive interchange, 4) the addition of D Street as a collector between Cathedral Canyon Drive and East Palm Canyon Drive, 5) the designation of Special Study Zones along Date Palm Drive and Da Vall Drive, in the vicinity of Interstate-10, where capacity augmentation may be required.

Intersection Enhancements

While the General Plan analysis focuses on the capacity and operation of roadway segments, the most influential controlling factors of the roadway system are found at intersections. Intersections are generally the most critical and constrained locations within the local street network and the ultimate arbiters of capacity. Detailed analysis and recommendations regarding intersection improvements are generally outside the realm of General Plan analysis. Major arterial intersections should be evaluated and prioritized for detailed analysis and future development planning and enhancement to assure that these system components facilitate the safe and efficient movement of traffic.



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City of Cathedral City
General Plan
Buildout Roadway Classifications

Cathedral City

Exhibit
III-6

ISSUES OF SPECIAL CONCERN

There are several areas of special concern above and beyond those of increased traffic and future capacity needs, including the adequacy of planned roadway improvements in adjoining jurisdictions, the need for additional rights-of-way for future improvements, the adequacy of facilities for pedestrians and bicycles, and other issues. Each of these areas is briefly discussed below. Special Study Zones are assigned along several roadway segments to address the need for additional capacity augmentation features in the future.

Areas of Potential System Failure

The General Plan is the result of an extensive effort to provide a balance of land uses and public services that enhance the City's residential and employment opportunities, and commercial and institutional services, while also assuring a high quality of life for City residents. Despite these efforts, physical and political circumstances beyond the City's control still result in a few areas where the future transportation system may prove inadequate to meet projected demand. These areas, where levels-of-service are generally projected to reach LOS E or LOS F, are briefly discussed below.

Segments Projected to Operate at LOS E at Buildout: As described in Table III-7, above, thirteen roadway segments in the planning area are projected to operate at LOS E upon General Plan buildout, including the following:

- Da Vall Drive, south of Interstate-10 (V/C ratio = 0.84)
- Da Vall Drive, north of Interstate-10 (V/C ratio = 0.87)
- Da Vall Drive, south of Gerald Ford Drive (V/C ratio = 0.82)
- Valley Center Boulevard, west of Date Palm Drive (V/C ratio = 0.85)
- Vista Chino, west of Date Palm Drive (V/C ratio = 0.93)
- Ramon Road, west of Date Palm Drive (V/C ratio = 0.85)
- Date Palm Drive, south of Valley Center Boulevard (V/C ratio = 0.95)
- Dinah Shore Drive, west of Cathedral Canyon Drive (V/C ratio = 0.91)
- Dinah Shore Drive, west of Date Palm Drive (V/C ratio = 0.82)
- Dinah Shore Drive, west of Da Vall Drive (V/C ratio = 0.84)
- East Palm Canyon Drive, west of Perez Road (V/C ratio = 0.88)
- East Palm Canyon Drive, east of Cathedral Canyon Drive (V/C ratio = 0.94)
- East Palm Canyon Drive, west of Date Palm Drive (V/C ratio = 0.96)

Although the delays associated with LOS E exceed desirable levels for design purposes, these roadways will still operate within their physical capacity. The amount of delay experienced by a motorist is primarily determined by turning movements at intersections. Typically, roadway segments, which are projected to operate at LOS E on a daily basis, can be adequately mitigated by providing additional turning lanes at intersections. The preservation of sufficient right-of-way along these segments is critical to the future construction of such improvements. Any mitigation should be based on a detailed analysis of the operation of intersections nearest these roadway segments.

Segments Projected to Operate at LOS F at Buildout: The following four roadway links are projected to operate at LOS F at buildout of the General Plan:

- Ramon Road, west of Landau Boulevard (V/C ratio = 1.00)
- Palm Drive, south of Date Palm Drive (V/C ratio = 1.22)
- Date Palm Drive, north of Vista Chino (V/C ratio = 1.35)
- East Palm Canyon Drive, east of Date Palm Drive (V/C ratio = 1.09)

Where roadway links are projected to operate at LOS F, the construction of additional through lanes and/or approach lanes is usually required to adequately reduce delays or provide alternative parallel routes. The preservation of sufficient right-of-way along these segments and at nearby intersections is critical to allow physical space for future improvements.

Interstate-10 Interchanges

A significant portion of buildout traffic in the planning area will utilize Interstate-10. The only existing I-10 interchange providing direct access to the City is located at Date Palm Drive, and buildout traffic projections are nearly twice the master planned roadway capacity for Date Palm Drive. To accommodate future traffic volumes in this vicinity, a second freeway interchange is proposed at the extension of Da Vall Drive. Such an interchange would effectively reduce future traffic volumes on Date Palm Drive. However, between Vista Chino and Valley Center Boulevard, Date Palm and Da Vall Drives are still expected to operate at LOS E or F on a daily basis. Additional capacity enhancements still will be necessary to assure acceptable levels-of-service at these gateways to Cathedral City. Therefore, Date Palm and Da Vall Drives, from Vista Chino to Valley Center Boulevard, are designated "Special Study Zones." Such a designation is intended to insure that the roadway segments are designed and improved to provide additional capacity in the future. Specific design and development enhancements should be able to improve both the V/C ratio and LOS and help relieve projected congestion on these roadway segments.

East Palm Canyon Drive

The buildout traffic projections suggest that capacity constraints may occur on East Palm Canyon Drive, east of Cathedral Canyon Drive to the city limits. However, the 1998 traffic impact analysis prepared for the Downtown Precise Plan includes a detailed peak hour evaluation that demonstrates that the intersections would operate at acceptable levels-of-service. While the assumptions used for the Precise Plan study were not identical to those used for this General Plan traffic analysis, they were quite similar, and future daily traffic projections were consistent for both projects. Access along East Palm Canyon Drive at the easterly city limit is physically constrained by the Whitewater River and Santa Rosa Mountains. Should delays along East Palm Canyon Drive become excessive in the future, the Mid-Valley Parkway can function as a parallel bypass by carrying traffic around the Downtown area.

Ramon Road

The General Plan traffic analysis assumes Ramon Road ultimately would be improved to a six-lane arterial highway. However, the buildout data indicate that, west of Landau Boulevard, Ramon Road is projected to carry future daily traffic volumes that exceed the capacity of a six-lane cross section.

Additionally, the existing four-lane bridge over the Whitewater River Stormwater Channel may not be improved beyond six lanes in the foreseeable future, given the high costs of widening the

bridge. Ramon Road's status as a Congestion Management Plan (CMP) roadway means that intersections along Ramon Road must operate at a minimum LOS E, and that future improvements can be funded by Transportation Uniform Mitigation Fees (TUMF). It is critical that adequate right-of-way at major intersections along Ramon Road be preserved, to the greatest extent possible, to accommodate future intersection improvements.

Mid-Valley Parkway

Due to right-of-way constraints along the Mid-Valley Parkway and the capacity constraints of its four-lane bridge across the Whitewater River Stormwater Channel, the General Plan traffic analysis assumes the parkway will be a four-lane facility throughout Cathedral City. Relatively moderate projected traffic volumes further suggest that the roadway may not need to be improved to a six-lane highway, as was originally proposed along certain segments. Compared to buildout of the previous General Plan, buildout of this General Plan will actually reduce travel demands along the parkway in Cathedral City by 7,300 vehicles per day, thereby providing additional capacity along the parkway to accommodate through traffic from Ramon Road and East Palm Canyon Drive. However, if the parkway remains four lanes, three of the five links through Cathedral City are projected to operate at LOS E on a daily basis.

Pedestrian Circulation

The General Plan and associated documents support planning which allows and enhances access to commercial services and places of employment and recreation without the essential use of motorized vehicles. In this regard, pedestrian and other non-motorized circulation is encouraged in the City wherever possible. Master planning the provision of sidewalks, bike lanes and off-street trails is especially important along major roadways in the community. Development that occurred prior to the City's incorporation includes areas where sidewalks are non-existent or discontinuous, limiting their usefulness as safe alternatives to vehicle travel. When considering future development, pedestrian and bicycle accommodation and safety should be given emphasis equal to that currently given to automobile access. While off-street trails are addressed in greater detail in the Parks and Recreation Element of the General Plan, the City should take advantage of the Coachella Valley Association of Governments' non-motorized transit planning, and the effort of trails groups Valley-wide currently under way, to plan for future trails.

Securing Future Right-of-Way

As cited above, development permitted prior to City incorporation did not always result in secured right-of-way adequate to meet future roadway and/or intersection needs. The City has generally been able to secure right-of-way from new development that has been needed to provide full-width mid-block roadway improvements, and additional right-of-way along major arterials designated as scenic corridors has also been secured.

Given the substantial traffic volumes projected at buildout of the General Plan, there will be an equally substantial need for expanded intersection improvements throughout the City. This circumstance will require that additional right-of-way be secured to provide for additional turning and through lanes. The greatest demand for additional right-of-way will be at future critical intersections, where dual left turn lanes and dedicated right turn lanes will be needed.

The City should initiate a detailed roadway and intersection analysis, as well as a prioritizing process to secure additional right-of-way where needed.

Parking and Access Facilities
Issues associated with adequate parking and access have been most prominent along East Palm Canyon Drive and other locations where older development exists. Many of these parking and access issues have been addressed with the development and implementation of the Downtown Precise Plan. Similar planning efforts are addressing these types of issues along Ramon Road. However, access issues still exist along such major roadways as Cathedral Canyon Drive, where extensive multi-family development and numerous driveways result in conflicting turning movements and associated hazards.

These lessons show that it is essential that new development, as well as projects undergoing redevelopment, be required to provide adequate on-site parking to meet demand and that parking lot ingress and egress be more thoughtfully controlled. Consolidation of parking lot entrances should be encouraged to minimize disruptions to traffic flow and facilitate the preservation of capacity, while still assuring vehicular and pedestrian safety.

Public Transportation
Created in 1977, the Sunline Transit Agency provides public transit service within the City and the Coachella Valley, carrying about 3 million passengers per year in a service area of more than 360 square miles. The Sunline fleet consists of buses powered by compressed natural gas (CNG) and equipped with wheelchair lifts and bike racks. Five routes currently (2002) service the City: Lines 14, 23, 30, 31 and 111.

Line 30 provides service on Date Palm Drive and west on Ramon Road. Line 23 provides service to several Cathedral City schools and the Cathedral City Boys and Girls Club, as well as portions of Palm Springs. Line 14 provides indirect service to Cathedral City by connecting Desert Hot Springs and Palm Springs along Gene Autry Trail and Vista Chino.

Line 31 is a Thousand Palms to Cathedral City route, which extends west along Ramon Road, south along Cathedral Canyon Drive, and east along Dinah Shore Drive. It loops along a portion of Plumley Road, Landau Boulevard, Date Palm Drive, and back to Ramon Road.

Line 111 provides service along East Palm Canyon Drive and passes through the "downtown" redevelopment area. Sunline is required to have bus stops that comply with the federal Americans Disability Act (ADA). The company also provides "Sun Dial" service, which consists of a fleet of small buses that offer curb-to curb service from home to destination. The service is wheelchair accessible and must be requested at least 72-hours in advance.

Transportation Demand Management
The urbanization of the Coachella Valley is expected to continue in the decades to come, and with continued growth, transportation demand and systems management will be necessary to preserve and increase available roadway capacity. Transportation Demand Management (TDM) requires the development and implementation of policies, plans and programs that result in the use of a wider range of transportation alternatives, including public transit and bicycles.

While an emphasis on alternative travel modes, such as carpooling, van pooling and mass transit will help, TDM can also include employee flex-time work schedules that reduce peak hour travel and associated traffic congestion. In response to state mandates, the Riverside County

Transportation Commission (RCTC) prepared a regional Congestion Management Program, which required Cathedral City and other cities to prepare TDM ordinances or risk the loss of federal transportation funds. The City has adopted a TDM ordinance.

Railroad Facilities

Rail freight service through the Coachella Valley is provided by the Union Pacific Railroad (UPRR), with freight transfer facilities located in Indio and Coachella. In addition, Amtrak service is available to Palm Springs and Indio on Union Pacific's line. These facilities carry between 30 and 40 trains per day, most of which are freight. Union Pacific is planning to add a full second track parallel to the existing one by 2003, and is projecting an associated 50%-70% increase in rail traffic.

The rail lines are designated as Centralized Track Control (CTC) facilities and include extensive electronic switching and communication facilities. Construction of drill spurs is possible to serve adjoining passenger or industrial uses and can range from $55,000 to $60,000 (1997). These costs do not include special engineering requirements associated with potential engineering constraints.

Palm Springs International Airport

Primary air transportation for Cathedral City and the Coachella Valley is provided by the Palm Springs International Airport, which is classified in the National Plan of Integrated Airport Systems (NPIAS) as a long-haul commercial service airport.

This airport is capable of supporting non-stop commercial service to destinations over 1,500 miles away and is classified as a small hub air passenger airport, based upon the percentage of national airline enplanements it supports. Since 1972, airport services have increased from 143,809 passenger enplanements to 486,644 in 1994. In 1998, the number of enplanements reached 629,473, and deplanements totaled 628,068. For all of 1998, the number of passengers arriving and departing the airport totaled 1,256,541.

Major destination cities include San Francisco, Chicago, Seattle and New York. Major carriers include Alaska, American, Skywest/United Express, and others. Commercial traffic is clearly seasonal, with the peak season being the January-February-March period and the slowest period occurring during the summer months. Commercial and passenger operations are expected to continue to grow. The number of passenger enplanements is projected to reach approximately 809,256 by the year 2015. However, considering the tremendous growth the airport has experienced in recent years, this projection appears to be very conservative.

Major Utility Corridors

Major corridors and easements for the transport of natural gas, electricity, communications, domestic water and sewerage, and storm drainage are also important components of the Circulation Element. Generally, the need for utility corridors is met through the provision of easements in or adjacent to City streets and along common lot lines.

Major electricity, natural gas and petroleum product transmission corridors have been established prior to incorporation of the City and are generally located north of Interstate-10. Future land use planning, including the development of subdivisions and the processing of development

applications, will require coordination between the City, developers, utility companies, and other service providers to assure the availability and provision of easements and rights-of-way for the extension of roads, utility lines, and public services (also see Public Utilities Element).

Bicycle Facilities

As discussed above, the City currently (2002) has only a partially integrated system of sidewalks, bicycle lanes, and multi-use trails within roadway designs and rights-of-way. While the General Plan does not include an adopted master plan for trails and bikepaths for non-motorized vehicles, proposed facilities are set forth in the CVAG "Non Motorized Transportation Element (1995)," and currently being updated, which may serve as the basis for further master planning of these facilities in the City. Carefully planned alternative transportation corridors (sidewalks, bike lanes, and multi-purpose trails) will enhance and give greater opportunity to the use of alternative modes of transportation and will help the community meet its goal of implementing the Ahwahnee Principles.

Future bike routes should be planned to provide safe routes for intra-City bicycle traffic and should be clearly marked and striped. Where possible, they should be designed as one-way bike routes, which flow in the same direction as adjacent automobile traffic. Combination sidewalks/bikeways require an eight-foot width. These multi-use trails will also serve as links to recreational facilities throughout the community.

FUTURE DIRECTIONS

As a whole, the General Plan policy document, transportation technical report, Program EIR, and Community Profile provide direction for the future planning of the City's roadway and circulation system. Areas of special concern have been identified and are further addressed in the General Plan Program EIR and traffic impact report. The above cited "Special Study Zones" and other areas of future focused analysis should be initiated as soon as is reasonably possible.

In addition to focused studies, the City should also continue to monitor and review land use trends and changes in traffic volumes and patterns. Periodic adjustments to planning and program implementation should be made by utilizing roadway improvement and maintenance management programs, regularly monitoring traffic on major roadways, and conducting ongoing inventories of current traffic and circulation patterns. Formal traffic monitoring should be conducted, at a minimum, once every two years.

The City should also pursue on-going coordination with State, regional and local agencies, which have shared jurisdiction over the state highways in the community. Through the implementation of this Element and involvement with regional, state and federal regulators, the City will progressively alleviate current problems and avoid future system inadequacies.

GOALS, POLICIES AND PROGRAMS

Goal 1

An intra- and inter-city transportation system that provides for the safe, efficient and cost-effective movement of people and goods, and enhances commerce and the overall economic well-being of the entire community.

Goal 2

A City-wide and neighborhood-specific transportation system that is responsive to, and which implements the Ahwahnee Principles of community design, through land use and transportation planning, to the greatest extent feasible.

Policy 1
The City circulation system shall be planned and developed to assure the provision of safe and efficient vehicular, pedestrian and bicycle access to all parts of the community, effectively linking residents and visitors to the full range of residential, employment, shopping, and recreational land uses.

Program 1.A
The City shall establish a schedule by which to study and evaluate "Special Study Zones" identified in the General Plan, to assure that these areas are appropriately designed and improvement funding is planned to include projected impacts.
Responsible Agency: Planning Department, Engineering, Transportation Commission, Planning Commission, City Council
Schedule: 2002, On-going

Program 1.B
The Public Works Department shall establish and implement a prioritized roadway and intersection study and analysis program to assure the provision of adequate future right-of-way and facilities at critical roadways and intersections. Said program may be incorporated into the five-year Capital Improvements Program, which should be reviewed and amended, as necessary, annually.
Responsible Agency: Planning Department, Engineering, Transportation Commission, Planning Commission, City Council
Schedule: 2002, On-going

Policy 2
Transit stops and pedestrian and bicycle paths should be sited in a manner which encourages the use of alternatives modes of transportation and provides safe, convenient access to commercial and employment centers, as well as institutional and recreational uses.

Program 2.A
A planning and engineering project review checklist should be developed, which includes all major aspects of the Ahwahnee Principles, as well as other applicable principles of neo-

traditional planning, to be used in reviewing development proposals in the City and on adjoining lands of interest to the community.
Responsible Agency: Planning Department, Engineering, Transportation Commission
Schedule: 2002, On-going

Policy 3
Current and future City roadway networks shall make every effort to assure minimum operating standards that do not exceed Level-of-Service (LOS) "E" (as set forth in the General Plan Traffic Report) along roadway segments and at intersections during peak hours of traffic.

Program 3.A
The City General Plan and its supporting documents shall include a master circulation plan that provides and assigns standards for ultimate roadway widths for improvements and rights-of-way. The master circulation plan shall be periodically reviewed to assure that adopted standards and assignments are consistent with actual and projected traffic volumes.
Responsible Agency: Planning Department, Engineering, Transportation Commission
Schedule: 2002, On-going

Program 3.B
Certain roadway segments projected to operate at LOS E at General Plan buildout, and the major intersections associated with them, are hereby designated as "Special Study Zones" to facilitate the detailed analysis of intersection turning movements and to preclude otherwise unacceptable traffic impacts.
Responsible Agency: Planning Department, Engineering, Transportation Commission
Schedule: Immediately, On-going

Program 3.C
"Special Study Zone" designations are hereby applied to the following roadway segments to facilitate focused analysis so that facilities are improved to provide additional capacity in the future: Date Palm Drive and Da Vall Drive, from Vista Chino to Valley Center Boulevard.
Responsible Agency: Planning Department, Engineering, Transportation Commission
Schedule: Immediately, On-going

Program 3.D
The City shall develop and implement roadway improvement standards which limit direct access to arterial roadways and provide raised median islands, to the greatest extent practical, in order to maximize roadway capacity and limit turning movement conflicts.
Responsible Agency: Planning Department, Engineering, Transportation Commission
Schedule: 2002, On-going

Program 3.E
The City shall coordinate with CalTrans, City of Rancho Mirage, CVAG and other interested parties in the planning, design, engineering and development of an Interstate-10 interchange with Da Vall Drive, extended.
Responsible Agency: Planning Department, Engineering, Transportation Commission, Cathedral City Planning Commission and City Council, CalTrans, Rancho Mirage City Council
Schedule: 2002, On-going

Policy 4
Given the programmatic nature of the General Plan traffic analysis, development proposals which may generate traffic volumes or associated impacts beyond the scope of the General Plan analysis should be required to conduct project-specific traffic studies to assure that project impacts are adequately mitigated.

Program 4.A
City staff shall analyze development proposals to determine the potential of the project to adversely impact mid-block segments or intersections of the road network. Development impacts shall be identified, and fair-share mitigation shall be established and incorporated into the conditions of approval.
Responsible Agency: Planning Department, Engineering, Transportation Commission, Planning Commission, City Council
Schedule: On-going

Policy 5
Mixed use and other integrated development plans may propose the construction of public and/or private streets that conform with the Ahwahnee or Neo-Traditional design principles, assuming sufficient technical support to argue for their safe and efficient use is provided, and the concerns of all public service and protection providers are satisfied.

Program 5.A
The City shall encourage developers to explore alternative designs of streets and other transportation facilities by providing, as appropriate, information on Neo-Traditional design concepts and standards that may meet basic performance and safety needs, while still being responsive to the Ahwahnee Principles.
Responsible Agency: Planning Department, Engineering, Transportation Commission, Planning Commission, City Council
Schedule: 2002, On-going

Policy 6
In order to preserve the capacity of the City's major roadways and assure a safe and economical circulation system, development proposed along arterial roadways shall be designed to limit access to these arterials to the minimum needed to effectively serve the development.

Policy 7
The City shall develop and maintain a master trails plan that guides the securing of right-of-way, improvements, and development fees and provides a comprehensive trails system that interconnects with trails of adjoining jurisdictions and regional trail systems.

Program 7.A
The City shall develop a master plan of public bicycle, hiking and equestrian trails, which identifies functional and recreational land uses, attracts the use of alternative modes of transportation, and assures safe and efficient connections to City-wide and regional trail systems.
Responsible Agency: Planning Department, Engineering, Transportation Commission, Planning Commission, City Council
Schedule: 2002-03

HOUSING ELEMENT

The Housing Element addresses the housing characteristics and needs of the City, including but not limited to, a description of existing housing types, condition of existing units, overcrowding, overpayment, homelessness, and the demand for affordable housing in the area.

California Government Code requires that every City and County prepare a Housing Element as part of its General Plan. In addition, State law contains specific requirements for the preparation and content of Housing Elements. According to Article 10.6, Section 65580, the Legislature has found that:

(1) The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order.

(2) The early attainment of this goal requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.

(3) The provision of housing affordable to low and moderate income households requires the cooperation of all levels of government.

(4) Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.

(5) The legislature recognizes that in carrying out this responsibility, each local government also has the responsibility to consider economic, environmental, and fiscal factors and community goals set forth in the General Plan and to cooperate with other local governments, and the state, in addressing regional housing needs. Section 65581 of the Government Code states that the intent of the Legislature in enacting these requirements is:

(a) To assure that local governments recognize their responsibilities in contributing to the attainment of the State housing goal.
(b) To assure that cities and counties prepare and implement housing elements which, along with federal and State programs, will move toward attainment of the State housing goal.
(c) To recognize that each locality is best capable of determining what efforts are required by it to contribute to the attainment of the State housing goal as well as regional housing needs.
(d) To ensure that each local government cooperates with other local governments to address regional housing needs.

Government Code Section 65583 outlines the required content of all housing elements including identification and analysis of existing and projected housing needs, and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. Specific requirements include the following:

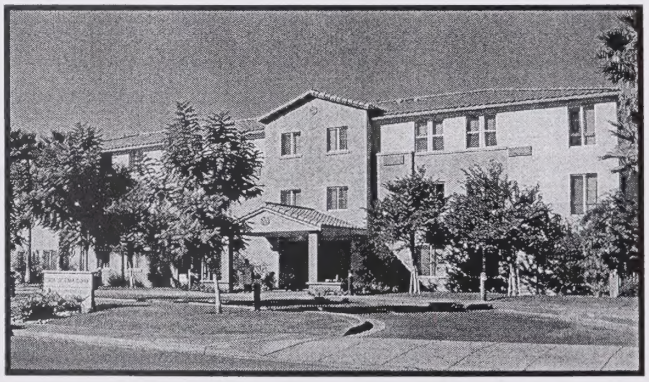
(1) An assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs. The analysis should include population and employment trends; documentation of household characteristics; inventory of land suitable for residential development; governmental and other constraints to new housing development; analysis of any special housing needs and an assessment of existing affordable housing developments.

(2) A program which sets forth a five-year schedule of actions the local government is undertaking or intends to undertake to implement the policies and achieve the objectives of the housing element in order to meet the housing needs of all economic segments of the community.

For purposes of this Housing Element, the term "previous planning period" is defined as the period from 1990 through 1999.

PREVIOUS HOUSING ELEMENT EVALUATION

The existing Housing Element contains policies and programs that encourage a balanced range of housing, available to all income levels and household compositions in quantities sufficient to meet the needs of the area by:



Casa Victoria

- adding 3,240 units to the housing stock at prices that are affordable to very low-, low- and moderate-income households.
- encouraging a variety of residential development that promotes the availability of housing to all segments of the community, recognizing such factors as: age, income, family size, single-person households and mobility.

The accomplishments of the City during the previous planning period are enumerated below.

Program 1.1.1 The City will continue to work with private developers to encourage the inclusion of affordable housing within new housing projects.

Market conditions have resulted in most housing built in Cathedral City being affordable to low and moderate income households. The City does not mandate the inclusion of affordable housing but continues to negotiate with builders for voluntary inclusion of restricted units within new developments. Of the 4,191 units built since the adoption of the last Housing Element in 1990, 1,266 units have been constructed which have affordable housing restrictions. The RHNA for the previous planning period for the City totalled 5,431 units for the period from 1989 to 1994. Clearly, the SCAG growth estimates prepared in 1989 over-estimated the potential growth in the City.

Program 1.1.2 Modular homes will continue to be permitted in single family zoning; design review and innovative site planning will be used to ensure aesthetic and architectural compatibility with surrounding uses.

One modular house and 12 prototypical panelized construction homes have been built during the previous planning period. The relatively low cost of wood frame construction has kept modular home construction out of the city, however, the modular homes are allowable in all residential zones. Steel frame construction of single family homes, has also become more common and may be a practical alternative to wood framing should lumber prices rise substantially.

Program 1.1.3 The City and Redevelopment Agency will pursue opportunities to include prototype higher-density housing in conjunction with redevelopment of the Highway 111 commercial corridor.

This program has been implemented through the Downtown precise plan and higher density housing plans are in the planning stages. This includes memorandums of understanding for projects with the Desert Cloisters project, the Mercy housing project, and the Arbor project. All three propose high density housing within the Downtown Precise Plan area.

Program 1.1.4 The Planning Department will use the Geo-base data program to conduct an annual survey to identify potential and appropriate sites for low-income housing projects and maintain an inventory based on the findings.

This function has been provided alternatively by the City's Property Acquisition Specialist. The RDA now has acquired an inventory of about 45 single family building sites and seven acres of multifamily land. In addition, the City has developed a database of affordable housing throughout the City.

Program 1.1.5 The City shall develop incentives and programs for the development of at least 648 affordable units annually.

Such incentives and programs have proven unnecessary in the current market where home prices are affordable to low and moderate income families; however, given the city's average annual production of 238 homes over the past eight years, the programs requirement for producing 648 affordable units was not realistic. The market would not have supported such a construction rate. Alternatively, the city has concentrated its efforts on the creation very low-income units. During the last planning period, 376 very low income units were created and another 89 have been approved for construction. Altogether, the City has assisted 1,266 very low and low income households.

Program 1.1.6 The City's Building and Planning Divisions will develop criteria to allow for reduced floor area requirements for units reserved for very low income families and low income seniors.

This program has been effectively implemented through the zoning ordinance.

Program 1.1.7 The Department of Community Development (Planning Division) will undertake a full review of the City's General Plan in order to insure that it meets the City's current identified housing and other needs by December 1991.

The review of the General Plan has been repeatedly delayed due to changes in planning staff and lack of resources. However, the General Plan is currently (2000) under review, and is expected to be adopted in 2002.

Program 1.1.8 The Department of Community Development (Planning Division) will recommend changes in zoning, if it should be demonstrated that a sufficient quantity of appropriately zoned land is not available for the production of lower-income housing as projected in the housing element.

This program has proven to be unnecessary given market conditions since its adoption. Please see the discussion on market housing on page 21.

Policy 1.2 Promote housing assistance and affordable housing to accommodate families and individuals disadvantaged in the housing market, and provide incentives to stimulate the production of low-very low-and moderate-income housing

This policy has been effectively implemented through several Redevelopment Agency housing assistance programs which utilize housing set-aside funds to leverage other State and federal sources of housing assistance. These include Casa San Miguel, Casa Victoria, and Cathedral Palms.

Program 1.2.1 The City Department of Community Development (Planning Division) will review the existing Density Bonus Program and recommend changes that will assure its use to encourage the production of lower-income housing units in conformance with State and Federal laws. Target date for adoption of modifications: December, 1990.

Changes to the Bonus Density Program proved unnecessary given the market conditions for housing in the areas covered by the overlay. The City has adopted a Home Ownership Housing Overlay that applies to some of the same areas covered by the density plan and has been effective in converting distressed rental units to affordable single family homes.

Program 1.2.2 Annually study and evaluate Federal, State and local financing options which are appropriate for the community, and which will help to subsidize and encourage low-income housing productions.

These evaluations are completed at least annually by the housing Office of the Redevelopment Agency.

Program 1.2.3 Utilize Housing Specialist and Redevelopment Agency Staff to study, develop and promote innovative programs for financing home construction and ownership for low-income households (Self-Help Program).

This program has been effectively implemented.

Program 1.2.4 Study possibilities and alternatives for mitigation of escalating land costs which constrain low-income housing afford ability. (Density bonuses, mixed use.)

Land costs have declined greatly since the adoption of this program and mitigation has proven unnecessary.

Program 1.2.5 Money in the Redevelopment Agency's Low and Moderate Income Housing Fund will not be allowed to accumulate excessively but will be utilized, as appropriate, in the following ways: (a) the purchase of properties that are problematic or which may not be developable for some time, to be land banked for future low-income housing projects; (b) joint venturing with both public and private entities to develop low-income housing; (c) rehabilitation of substandard, unsafe or unhealthful low-income housing projects, (d) other programs that will stimulate the supply of low-income housing.

This program has been effectively implemented through programs and annual budgeting of the Redevelopment Agency Housing set aside funds.

Program 1.2.6 Allow and encourage development of public assisted housing where appropriate and compatible with the existing uses. Continue cooperation on housing projects with the Riverside County Housing Authority and other County, State and Federal agencies.

The city has participated in the planning and financing of several publicly assisted housing projects/programs since adoption of this ordinance and continues to work cooperatively with public and private affordable housing groups. These include Casa San Miguel, Casa Victoria, and Cathedral Palms.

Program 1.2.8 Study the feasibility of initiating an affordable housing fund to be financed by mitigation fees collected from developers. Fees may be based on jobs generated per square foot of commercial construction, the cost of a new residential unit and the subsidy required to make those units affordable to low- and moderate-income households.

Not implemented. The market-based supply of affordable low and moderate income housing has kept pace and exceeded the demand stimulated by new commercial construction.

Program 1.2.9 The City Redevelopment Agency will continue negotiations with the Housing Authority of Riverside County for a joint-venture project that will endeavor to produce 500 low and moderate income housing units by 1995.

Not implemented. The Housing Authority is now reducing its investment in Agency-owned housing. Previously anticipated funding sources are not available.

Policy 2.1 The City will provide assistance and incentives to the rehabilitation of existing housing units that are substandard, unsafe or unhealthful, or units that are in eminent danger of so becoming.

The City's RDA has several programs including the Community Home Improvement Program (CHIP), and the Sewer Hook-up Assistance Program (SHARP), that provide financial assistance to lower income homeowners for making essential repairs/improvements to their dwellings. The Agency substantially rehabilitated the Cathedral Palms project into senior studio apartments, assisted in the conversion of 16 duplexes into 32 single family homes, and implemented a development agreement which resulted in the relocation of 4 dwelling units in the Whitewater neighborhood.

Program 2.1.1 Develop a program to identify and monitor areas of substandard housing units on the condition of these areas and units, using Building Department records, Code Enforcement reports and on-site inspection.

The City has identified three neighborhoods with a high incidence of substandard or at risk housing (Downtown, Whitewater, and Dream Homes), and continues to monitor conditions while developing programs to improve these areas.

Program 2.1.2 Actively utilize information from the 1989 CVAG Regional Housing Needs Analysis, the forthcoming 1990 U.S. Census report, and City Code Enforcement activities to develop strategies for improvement of substandard housing conditions.

A formal strategy was not implemented. However, the data sources cited in the Program are utilized regularly by the Office of Housing Assistance in considering the needs of the community, and how proposed projects will satisfy those needs.

Program 2.1.3 Future condominium conversion or conversion to other uses shall be reviewed to determine that it does not adversely impact the rental market.

This was accomplished in conjunction with the Duplex Conversion Program. No other such conversions have been proposed since adoption of the program.

Program 2.1.4 Develop tools and programs that will motivate landlords to repair and maintain substandard units.

The City has implemented several improvement programs, including the "Paint the Town" program, Code Enforcement assistance program, and the Bank of America Title 1 program, which provides subsidized loans for residential improvements throughout the City.

Program 2.1.5 Utilize the AB 1448 amendment to the California Health and Safety Code, when necessary, to accomplish the rehabilitation of unsafe or unhealthful units.

Not implemented, but may still be considered in conjunction with 2.1.1 (above).

Program 2.1.6 Staff will work with other community organizations to disseminate information on programs that assist with housing maintenance and rehabilitation for special needs groups (i.e., seniors, handicapped, low-income households, etc.).

This program has been effectively implemented through the Office of Housing Assistance. The Agency currently administers four programs geared toward maintenance and rehabilitation of existing homes for special needs groups. In addition, the Office of Housing Assistance coordinates the Senior Home Repair Program operated by the County of Riverside. Information for all programs is disseminated through the regional network of housing agencies and non-profits as well as the City's Office of Housing Assistance.

Policy 3.1 The City will seek to assist those persons with special housing needs.

The City's Office of Housing Assistance (OHA) assists those with special housing needs through referrals, advice or personal consultation. The staff is bi-lingual.

Program 3.1.1 Establish a plan by which to identify and contact households with special needs (i.e., handicapped, homeless, overcrowded, poor, elderly, overpaying, etc.).

The OHA works with television and print media as well as direct mail, police, fire, code enforcement and other City staff, County staff, non-profit organizations such as Catholic Charities, the Desert AIDS Project, the Coachella Valley Association of Governments, the Coachella Valley Housing Coalition, the Riverside County Economic Development Agency, Episcopal Community Service, Jewish Family Services, ACCESS, Office on Aging and others.

Program 3.1.2 Provide direct one-to-one assistance to identified special needs households in advising them of programs which can assist their situation.

The Office of Housing Assistance provides this counseling as needed.

Program 3.1.2 Work in close conjunction with CVAG, the Riverside Housing Authority and Coachella Valley Housing coalition to assess and meet the needs of families disadvantaged in the housing market.

The OHA works closely with these and other housing assistance agencies in the region.

Program 3.1.4 Review, and if necessary, amend the zoning ordinance to permit the operation of emergency shelters in specified locations of the City. Identify potential locations for emergency shelters.

The City's zoning ordinance permits emergency shelters in virtually any location subject to Conditional Use Permit approval. One shelter has been approved and is operating successfully. Transitional Housing by Episcopal Community Services has opened 22 beds, and will add 32 this year.

Program 3.1.5 The City will annually provide a portion of CDBG and/or Redevelopment Set-aside funds for local and regional programs that provide emergency shelter and support services to the homeless of Cathedral City. Preference will be shown for programs that provide access to a full range of support services for the homeless, as well as emergency housing.

Casa San Miguel was developed using a number of different funding sources, including CDBG.

Program 3.1.6 The City Housing Specialist will work with the Public Safety and Police Departments and other regional and local organizations to insure that homeless persons and families are aware of and have access to appropriate shelter and assistance.
This is being done as needed.

Program 3.1.7	The City Housing Specialist will monitor and promote equal housing opportunity by publicizing the City's programs and efforts to eliminate discrimination in housing. Effectively implemented.
Program 3.1.8	The City will continue to maintain a dual-language capacity at City Hall and especially in Departments where a high percentage of daily personal contacts may be expected to be with non-English speaking persons. Effectively implemented
Policy 4.1	Maintain records and collect data during the year to be included in the annual planning report to Planning Commission. Effectively implemented by the RDA Housing and the Planning Division through the annual report.
Program 4.1.1	Continue participation with and monitoring of CVAG regional housing programs and data collection, as well as other County, State and Federal programs Effectively implemented by the RDA Housing Specialist.
Program 4.1.2	Augment outside data with data based on City information and records. The Housing Division maintains all local data which fulfills this program
Program 4.1.3	Establish a site-specific list of problem housing units and areas, with periodic updates on deterioration or improvement. This was started with the Housing Inspector position and the Downtown Housing survey in 1996, plus the Focus 2001 program in the Whitewater neighborhood.
Program 4.1.4	Continue contact with other housing officials and specialists and workshops for Council, Planning Commission and Staff to update their awareness of housing programs and issues. The Housing Specialist makes periodic reports to Council regarding housing-related issues.
Program 4.1.5	At the earliest possible time, incorporate new data from the 1990 U.S. Census into the information contained in this Housing Element. Statistical information derived from the Census was incorporated into the Housing Element document.

Policy 5.1	Review all new residential developments to ensure compliance with Title 24 regulations. Implemented effectively through standard plan check procedures of the building division.
Program 5.1.1	Review and if necessary, update building ordinance and related requirements and standards to reflect current situations and technology. The local building code is updated regularly to comply with the latest Uniform Building Code.
Program 5.1.2	Ensure that the Planning Division will continue the Circulation Element reflects efficient transportation planning (sic.). Effectively implemented by the Planning Division through regular review of the General Plan, Specific Planning and project development review.
Program 5.2	Support efforts by the private sector to utilize energy efficient site and building design. Effectively implemented by the Agency and the Planning Division through project development review.
Program 5.2.1	Provide for flexibility in planning processes and subdivision designs to allow for innovative site and building design. Effectively implemented through a variety of planning tools including Specific Plans and Planned Unit Development permits through the Planning Division and the development review process.
Program 5.3	Inform the public of various tax incentive programs for residential developments that utilize passive efficient site and building design. Not implemented
Program 5.3.1	Utilize public information mechanisms, i.e., Redevelopment Agency or other City staff, Senior Centers, Chamber of Commerce, local contractors, developers, real estate officers and utility companies to inform the public of potential economic benefits from reduction of energy consumption. The City has actively promoted the Edison Company's Evaporative Cooler Program, which is available to very low income households.

Policy 6.1 Support progressive and innovative efforts by property owners and developers to achieve a balance of appropriate uses along major arterials and the Highway 111 corridor, with special consideration for households with limited mobility and transportation (elderly, handicapped, etc.).

Effectively implemented by the RDA and the Planning Division through a variety of methods including the Downtown Precise Plan, Specific Plans, and the city's adoption of urban design principles that also encourage a balance of uses along major arterials.

Program 6.1.1 Define compatible mixed uses allowed near and within Central Business District.

Effectively implemented through the RDA Downtown Precise Plan.

Program 6.1.2 Provide incentives for new residential developments to locate near existing or proposed commercial activities.

Effectively implemented through Downtown revitalization project. Project assistance from Housing set-aside funds was strongly weighted toward Downtown development.

Program 6.1.3 Higher density Multi~family residential developments should be located and designed to provide convenient access to commercial, employment and recreational activity centers.

Effectively implemented through the Downtown Precise Plan and the Uptown Village Specific Plan, however, a broader, city-wide reevaluation of land use designations is needed.

Program 6.2 Ensure that adequate replacement housing is available to special needs households within the redevelopment area.

Effectively implemented through the development of Casa Victoria and Casa San Miguel.

Program 6.2.1 Encourage, when compatible with surrounding uses, mixed uses in areas of transitional development such as higher density residential, retail commercial, and compatible light industrial activities.

Effectively implemented in some Specific Plan areas, however, broader city-wide land use changes are needed.

Program 6.2.2	Multiple family residential projects should be encouraged near the Central Business District to provide a transition between residential and commercial areas. Effectively implemented by the RDA through the Downtown Precise Plan
Program 6.2.3	Study the possibility of higher density and limited income/special needs housing as an integral part of any redevelopment of the Central Business District near the Highway 111 corridor. Effectively implemented by the RDA through the Downtown Precise Plan, and the Desert Cloisters, Arbor and Mercy housing projects.
Policy 7.1	Carefully consider increased capacity of streets, utilities and parks that may be needed because of increased population. Effectively implemented by the Planning Division through the project development and environmental review processes.
Program 7.1.1	Annually review transit needs of the community; i.e., bus, taxi, bike lanes, bridges, air services; with special attention to the needs of the elderly low-income workers, children and the handicapped. The City has established, and regularly maintains communications with the SunLine Transit Agency, including review of proposed projects for transit needs.
Policy 7.2	To the maximum feasible degree, housing and residential development shall, by design, encourage safe living. Implemented effectively by the Planning Division through the City's Design Guidelines and the development review process.
Program 7.2.1	Continue to improve and maintain adequate street lighting in existing neighborhoods. Implemented effectively through the Engineering Division through Capital Improvement project planning and private project review.
Program 7.2.2	Require neighborhood infrastructure and amenities improvements of developers in direct relationship to impacts and benefits received, concurrent with population increases. Implemented effectively through the city's subdivision ordinance, design guidelines and development and environmental review processes.

Program 7.2.3	Review and possible revision of single-and multiple-family dwelling site development standards if and when new safety or quality-of-life issues arise. No changes necessary.
Program 7.2.4	Research the possibility of adoption and enforcement of a Building Security Ordinance that provides standards to minimize an environment conductive to crime. The City is implementing the Crime Free Housing Program in this fiscal year's budget.
Policy 8.1	Provide incentives for homeowners to upgrade or enhance homes in existing neighborhoods. Implemented effectively through the Bank of America Title 1 loan program, the Paint the Town Program, County Home Improvement Loans, and the Community Home Improvement Program. In addition, the Joint Home Ownership Overlay and Duplex Conversion programs of the Planning Division and RDA have effectively improved previously run-down neighborhoods.
Program 8.1.1	Areas of identified deteriorating or substandard housing shall be re-evaluated for planning purposes. Such evaluation is conducted on an ongoing basis by the Planning Division through land use planning and zoning.
Program 8.1.2	Continue to give priority for infrastructure improvement to neighborhoods that demonstrate a commitment to self-improvement. This approach was effectively implemented through the neighborhood planning and Assessment District initiation process for the Rio Vista neighborhood by the Department of Community Development.
Program 8.1.3	Utilize Redevelopment Agency Staff to disseminate information on assistance available to low-income home-owners for repairs and rehabilitation. Implemented effectively through the city's Office of Housing Assistance.

Program 8.1.4 Staff will annually assess available local, State and Federal funding and programs for possible incorporation into community development projects.

Implemented effectively through the City OHA which administers the Regional Senior Home Repair Program and works with County EDA on Home Improvement Programs loans. Staff has also effectively assembled multiple funding sources to allow the development of the Casa San Miguel, Casa Victoria, Mercy housing, Desert Cloisters and Cathedral Palms projects.

Program 8.1.5 Continue community beautification programs such as the Pride Committee, the Blue Ribbon Committee, the Home of the Month Program, and encourage and promote cleanup and fix up programs by local service organizations.

Although the specific Programs listed have not been maintained, the city continues with beautification programs including the city's annual Community Services Day where beautification projects are undertaken by city employees in recognition of Martin Luther King day and the "Paint the Town" program.

Program 8.1.6 In-fill development of vacant lands shall be given priority through various types of available public assistance in order to better utilize existing public services and infrastructure.

The RDA has acquired approximately 60 home sites on vacant lots or parcels in developed neighborhoods.

Policy 8.2 Discourage the encroachment of undesirable and incompatible uses in residential areas.

Effectively implemented through land use and zoning regulations by the Planning Division.

Program 8.2.1 The City will conduct periodic review of existing Zoning Ordinance to ensure that sufficient standards are in place to comply with this policy.

Effectively implemented through ongoing maintenance of the zoning ordinance by the Planning Division and Planning Commissions annual report.

Program 8.2.2 The City will continue an active code enforcement program emphasizing the neighborhood Target Areas in order to maintain and upgrade living conditions of the neighborhood.

Effectively implemented through the City's Fire Department code enforcement function and the Office of Housing Assistance.

Program 8.2.3	New development near incompatible uses shall provide a buffer or screen between uses, (i.e., open space, landscaping, perimeter walls, etc.).
	Effectively implemented through project development review by the Planning Division.
Policy 8.3	Utilize various implementation tools to promote and establish community and neighborhood character.
	Effectively implemented through project development review, tentative tract map improvement requirements, capital improvement projects and improvements made through Assessment Districts.
Program 8.3.1	Address community and neighborhood character through planning efforts such as Specific Plans and Development applications.
	Effectively implemented through Specific Plans and Development applications by the Planning Division.
Program 8.3.2	Continue to utilize and keep updated the City Design Guidelines in order to provide a basis for building community and neighborhood character.
	Effectively implemented by the Planning Division.

DEMOGRAPHIC BACKGROUND

Introduction

The City's housing needs include a comprehensive assessment of current and projected housing needs for all segments of the community and all economic groups. The means by which families and individuals of all economic situations are adequately housed within the context of rising costs and increasing competition for available physical and financial resources has become, in recent years, a primary concern.

This section of the Housing Element presents the demographic background necessary for the comprehensive analysis of the City's housing needs.

Regional Setting

Cathedral City is located in the Coachella Valley, a subregion of Riverside County. The County encompasses a large portion of Southern California, and over the past two decades has experienced extremely rapid growth. The County's population increased by 67%, from 663,923 in 1980 to 1,110,000 in 1990. The California Department of Finance County population estimate for 1999 was 1,473,307 persons, which further increased the population by 33%. The incorporated cities of the Coachella Valley followed similar trends for population growth within the same time period. This rapid rate of growth on both the County and local level can in part be attributed to the low cost of housing in the Coachella Valley as a whole.

Population

The 1990 U.S. Census estimated Cathedral City's population to be 30,085. In 1998, the population grew to approximately 36,023, an increase of 19.7%. The population as of January 1, 2000 was estimated by the Bureau of the Census at 42,647. This represents an average annual growth rate of more than 3% in ten years.

Ethnic Characteristics

Table III-8 and III-9, below show the ethnic distribution for Cathedral City in 1990 and 2000, respectively. The ethnic makeup of the City has changed in the last decade.

Table III-8
Ethnic Characteristics, 1990

	Number	% of Total
White	22,349	74.2%
Black	666	2.2%
Native American	299	1.0%
Asian	1,092	3.6%
Other	5,679	18.9%
Total	**30,085**	**100%**
Hispanic*	11,884	39.5%

* Hispanic persons can be identified under either the white or other category, and are therefore considered separately. Source: 1990 U.S. Census

Table III-9
Ethnic Characteristics, 2000

Race	No. of Persons	% of Population
One Race		
White	27,845	65.3%
Black	1,169	2.7%
American Indian/Alaska Native	440	1.0%
Asian	1,575	3.7%
Native Hawaiian/Pacific Islander	32	0.1%
Other Race	9,834	23.1%
Two or More Races	1,752	4.1%
Total	**42,647**	**100%**
Hispanic or Latino (of any race)	21,312	50.0%

Source: U.S. Census, 2000.

Age Distribution

Table III-10 shows the number of persons in various age groups and the percentage of each within the total population.

Table III-10
Age Distribution, 2000

Age Range	# Residents	% of Pop.
Under 5 years	3,763	8.8%
5-9 years	3,974	9.3%
10-14 years	3,587	8.4%
15-19 years	3,059	7.2%
20-24 years	2,651	6.2%
25-34 years	6,386	15.0%
35-44 years	6,660	15.6%
45-54 years	4,318	10.1%
55-59 years	1,590	3.7%
60-64 years	1,456	3.4%
65-74 years	2,868	6.7%
75-84 years	1,848	4.3%
85+ years	487	1.1%

Source: U.S. Census, 2000.

Household Income

The 1990 Census identified a County median household income of $36,000, however the median household income in Cathedral City for the same time period was $30,908. In fact, 56.6% of the City's households in 1990 had an income below the County median household income. Table III-11 demonstrates income levels for City households in 1990.

Table III-11
Household Income Distribution,1990

Income	No. Of HH	% of Total
$ 0-4,999	552	5.1%
5,000-9,999	1,044	9.7%
10,000-14,999	968	9.0%
15,000-24,999	1,653	15.3%
25,000-34,999	1,886	17.5%
35,000-49,999	1,928	17.8%
50,000-74,999	1,850	17.1%
75,000-99,999	559	5.1%
100,000+	365	3.4%
Total	**10,805**	**100%**

Source: 1990 U.S. Census

Employment

The residents of Cathedral City have generally been employed in the service and retail trade sectors. 1990 Census information incorrectly showed a large number of employees in the "Agriculture and Forestry" sector, although those employees are landscapers and gardeners. Table III-12, below, shows the 1990 Census data on employment in 1990, while Table III-13 lists the largest employers in the City in 1998.

Table III-12
Employment by Industry, 1990

Agriculture, Forestry & Fisheries	781
Mining	0
Construction	1,929
Manufacturing, non-durable goods	274
Manufacturing, durable goods	465
Transportation	480
Communications & public utilities	369
Wholesale trade	259
Retail trade	3,158
Finance, Insurance & real estate	989
Business & repair services	638
Personal services	1,510
Entertainment & recreational services	598
Health Services	1,059
Educational services	564
Other services	588
Public Administration	283
Total	**13,944**

Table III-13

Largest Employers in Cathedral City, 1998

Palm Springs Unified School District	1,400
Wal-Mart	280
Double Tree Resort	250
Cathedral City Auto Center	195
City of Cathedral City	170
Lucky Supermarkets (2 stores)	150
Lawrence Welk's Resort	140
Southern California Edison	140
Sam's Club	126
Charter Hospital	125
Coca Cola Bottling	75

Historic Housing Patterns

It is estimated that in January of 2000 there were a total of 17,916 housing units in the City. It is significant to note that approximately 60.1% of all dwelling units are single family homes with another 16% provided in the form of mobile homes. Only 11% of all housing units are in multi-family housing with more than 5 units.

Table III-14
Housing Units by Type

Units in Structure	1990		2000 (Estimate)	
	Number	Percent	Number	Percent
Single Family Detached	6,525	42.85%	8,745	48.8%
Single Family Attached	1,999	13.13%	2,034	11.3%
2-4 Units, Multi-family	1,966	12.91%	2,295	12.8%
5 or more Units, Multi-family	1,409	9.25%	1,976	11.0%
Mobile Home or Trailer	3,083	20.24%	2,866	16.0%
Group Quarters	247	1.62%	52	0.3
Total	**15,229**	**100%**	**17,916**	**100%**

Source: 1990 Census and California Department of Finance, January 2000

Vacancy Status

The 1990 Census showed an overall vacancy rate of 28.3% in Cathedral City. Correcting for seasonal or recreational units, which are considered vacant by the Census but are not available or used for permanent occupancy, the vacancy rate decreased to 12.6%. Similar numbers were estimated in 1998. At that time the City showed an overall vacancy rate of 28.31%. When the same seasonal reduction factor was applied to the 1998 figures, the vacancy rate was again 12.6%.

Table III-15
Vacancy Status

Unit Type	Number of Units Vacant	Percentage of Total Vacant Units City-wide
For Rent	555	12.9%
For Sale	345	8%
Rented or Sold, not occupied	236	5.5%
Seasonal, Recreational or Occasional Use	2,385	55.3%
Other Vacant	790	18.3%
Total	4,311	100%

Table III-16
1990 Overcrowding
Renter Occupied Units

Persons Per Room	Number Of Households
0.5 or less	1,839
0.51 to 1.00	1,376
1.01 to 1.50	354
1.51 to 2.00	268
2.01 or more	336

The Census further estimated the number of households in different income groups who lived in overcrowded conditions. These estimates are shown in the Table below.

Table III-17
Overcrowding by Income Level, 1990

Household Type	Very Low Income	Low Income
Total Renter Occupied	**417**	**250**
Elderly renters	0	17
Small family renters	159	50
Large family renters	234	173
Total Owner Occupied	**75**	**155**
Elderly owners	0	0
Small family owners	4	33
Large family owners	71	122

The recession of the early to mid 1990's caused a number of families and households to consolidate, in order to pool their resources. In 1990, the average household size for the City was 2.75 persons per occupied housing unit. Since 1990, the number of persons per household

has risen nearly every year. The 2000 Department of Finance estimates indicate that the average household size in Cathedral City is 3.004 persons.

Overpayment

The Census also estimates those households which are overpaying for housing. Overpayment is defined as more than 30% of all household income being dedicated to the cost of housing. Table III-18, below, lists the 1990 estimates.

Table III-18
Overpayment by Income Level, 1990

Household Type	Very Low Income	Low Income
Total Renter Occupied	**1,217**	**596**
Elderly renters	304	63
Small family renters	316	270
Large family renters	230	194
Total Owner Occupied	**652**	**539**
Elderly owners	349	123
Small family owners	112	199
Large family owners	82	132

Housing Prices

Land costs include the costs of raw land, site improvements, and all costs associated with obtaining government approvals. Building and construction costs for residential development in Cathedral City range between $65 and $85 per square foot. Fully-developed, ready-to-build single family lots are currently available at prices ranging from $5,000 to $20,000 depending on the size and location.

The cost of a newly-constructed home in Cathedral City is between $100,000 and $300,000. Existing homes for resale are generally priced between $85,000 and $200,000 [i]. This price range makes Cathedral City affordable to a large segment of the population, and has been the reason for its rapid expansion as a young family community.

Housing in Cathedral City is moderately priced, as illustrated by the housing costs for both single family owner occupied units and rental units. In 2000, the median annual income for households in Riverside County was $47,400. Using the allowable monthly payment for housing of 30% of gross household income, the median income family can afford a monthly housing payment of $1,162 (Principal, Interest, Taxes, and Insurance [PITI]). The Table below clearly demonstrates that the City's housing is affordable.

Table III-19
Affordability of Cathedral City Housing

Type of Housing Cost	Ownership	Rental
Median Single Family Purchase Price	$113,200	
Median Mortgage Costs (PITI)	$994	
Median Rental Rate		$649
30% of Median Household Income	$1,162	$1,162
Amount below 30% of Income	-$221	$513

Inventory of Lands for Housing

There is a substantial amount of vacant land within the City and the sphere of influence available for residential development. Altogether, 1,254.36 acres of vacant land are available for development. Of this land, 1,501 single family residential lots have been subdivided and are still vacant, and 644 R-2 lots have been subdivided but remain vacant. The following Table lists acreage available in each residential zoning designation. The right hand column gives the number of units which could be developed in each of these designations (all acreage has been reduced by 25% to allow for the construction of streets, infrastructure and open space areas). Exhibit III-7, on the following page, depicts the locations of the vacant lands within the City which are located within one half mile of all services.

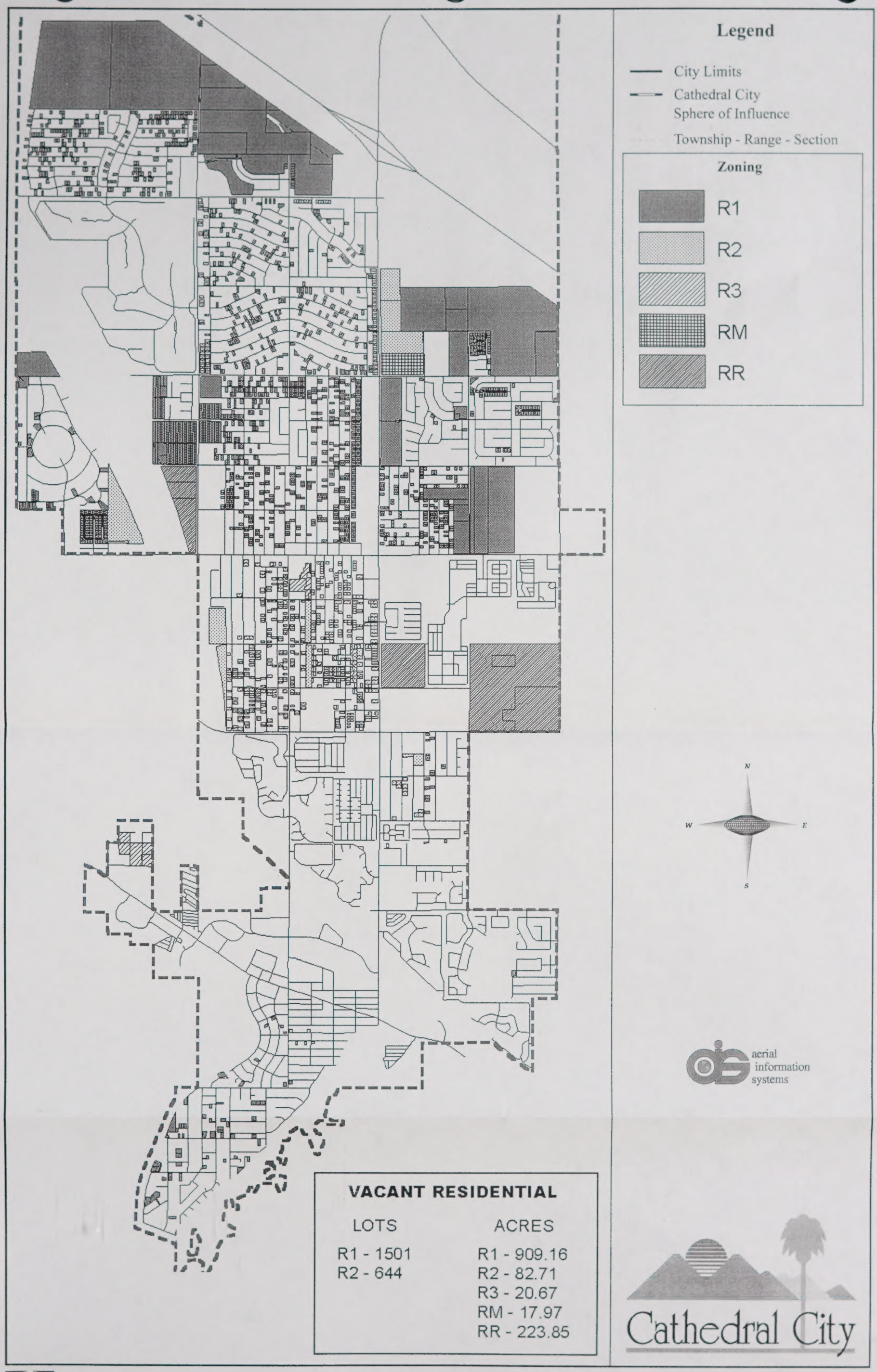
Table III-20
Vacant Residential Lands by Zoning Designation

Designation	*Acreage*	# of Units
R1	909.16	4,091
R2	82.71	682
R3	20.67	310
RM	17.97	202
RR	223.85	1,175
Total	**1,254.36**	**6,460**

In 1995, Cathedral City commissioned Economic Research Associates to prepare an analysis of potential new development. The report was completed in February, 1996 and identified the total housing expected to be developed from 1995 to 2015. The results of this study are presented in Table III-21.

Table III-21
Potential New Residential Development
1995-2015

	Number of New Units				
Housing Type	**1995 to 2000 (Actual)**	**2000 to 2005**	**2005 to 2010**	**2010 to 2015**	**1995 to 2015**
Single Family	1,092	300	280	270	1,150
Townhouse	0	400	430	520	1,700
Duplex	18	75	75	100	300
3-4 Units	n/a	200	175	150	700
5-49 Units	329	200	200	150	700
50+ Units	n/a	50	50	0	100
Mobile Homes	0	50	50	50	200
Retirement Housing	0	350	350	350	1,400
Congregate Care	0	200	200	200	800
Convalescent Housing	0	200	200	200	800
Total	**1,439**	**2,025**	**2,010**	**1,990**	**7,850**



TERRA NOVA®
Planning & Research, Inc.

City of Cathedral City
General Plan
Vacant Residential Land with Services

Exhibit
III-7

Age of Housing Stock

The age of housing is an important characteristic of the housing stock, indicating the relative condition of the housing. Most homes have a useful life of approximately twenty to thirty years. At that time, the need for maintenance and rehabilitation becomes critical if the housing is to remain safe and sanitary.

73.9% of the City's housing was built less than 30 years ago, while 29.7% of the housing predates 1970, as demonstrated in the Table below.

Table III-22
Age of Housing Units

Year Built	No. of Units	% of Total
1991-1999	2,460	14%
1989-90	1,150	6%
1985-1988	4,419	25%
1980-1984	2,718	15%
1970-1979	2,987	16%
1960-1969	1,991	11%
1950-1959	1,192	6%
1940-1949	601	3%
Before 1940	772	4%
Total	**17,689**	**100%**

Source: 1990 U.S. Census

Generally, the oldest homes, built before 1940, were built in the Downtown area. Homes built between 1940 and 1949 were generally built in the Cove. Homes built from 1950 to 1959 were built in the Downtown, Cove and Outpost neighborhoods; and homes built from 1960 to 1969 were built in the Dream Homes, Outpost and Cove neighborhoods. From 1970 to the present, the distribution of construction has been more widespread throughout the City, and represents primarily the construction of in-fill lots in existing subdivisions.

While some of the City's older units have been well maintained, the City has conducted a series of surveys identifying particular neighborhoods that have been targeted for a concentrated rehabilitation effort. These areas are estimated to contain units in need of moderate to significant rehabilitation. In addition, the City has seen 164 of its oldest units, located in the Downtown Precise Plan area, removed and replaced during the previous planning period. The City will continue to replace affordable units removed, as described in the Housing Replacement Plan and Redevelopment Agency Implementation Plan.

Since the 1990 Census, 2,972 housing units have been built in the City, as demonstrated in Table III-23, below. Although 75.5% of these units have been single family dwellings, the City has also produced 688 apartment units during this time period.

Table III-23
Residential Housing Units Built by Type 1990-99

Year	SFD	Multi	Condos	Apts.	Total
1990	379	123	0	10	512
1991	210	70	0	0	280
1992	207	41	0	0	248
1993	93	19	0	0	112
1994	263	0	0	80	343
1995	174	2	0	0	176
1996	133	0	0	0	133
1997	97	2	0	0	99
1998	298	6	0	89	393
1999	390	6	40	240	676
Total	**2,244**	**269**	**40**	**419**	**2,972**

Riverside County Income Limits

The 2000 median income calculated for Riverside County for a family of four is $47,400. This is used to calculate very low (50% of median) and low (80% of median) incomes for use in State and federal subsidized housing programs.

Table 24
Affordable Housing, Income Limits
County of Riverside, 2001

# of Persons	Annual Income Standards			
	Very Low	Low	Median	Moderate
1	$17,450	$27,950	$34,950	$41,950
2	$19.950	$31,950	$39,900	$47,900
3	$22,450	$35,950	$44,900	$53,900
4	$24,950	$39,900	$49,900	$59,900
5	$26,950	$43,100	$53,900	$64,700
6	$28,950	$46,300	$57,900	$69,500
7	$30,950	$49,500	$61,900	$74,300
8	$32,950	$52,700	$65,850	$79,050

Source: California Department of Housing and Community Development, Income Limits for Riverside County, 2001

Restricted Housing Projects

The City of Cathedral City has aggressively pursued its fair share of affordable housing, and currently includes the following projects within its boundaries:

Mountain View Apartments: Is a 280 unit project located at 68-680 Dinah Shore Drive. The project was completed in three phases completely financed with a FmHA 515 loan. The project was built in 1982, and refinanced in 1997.The complex is restricted to seniors 62 or older, unless disabled or handicapped. The residents' rent is restricted to 30% of their income. The units are restricted to very low and low income households.

Corregidor Apartments: is a 14 unit project restricted to very low income families. It was built in 1985 using LPRH housing funds. This project site is owned by the Riverside County Housing Authority and is located at 34-355 Corregidor Drive.

Casa Victoria Apartments: is a 50 unit project opened in 1999 using HUD 202 funds. This senior complex is located at 34-445 Corregidor Drive. The project is restricted to low income seniors 62 years or older, and the rent is restricted to 30% of their income.

Terracina Apartments: is an 80 unit project located at 69-175 Converse Road. The project includes 2 to 4 bedroom units, with 33 restricted to very low income families, and 47 restricted to low income families. The project was constructed using tax credits.

Cathedral Palms: is a 230 unit project located at 31750 Landau Boulevard. The project was originally constructed in 1968 and substantially rehabilitated in 1997, using bonds and Agency set aside funds. The project offers studios and 1 bedroom apartments to very low income seniors (over 55).

Ocotillo Place: provides 135 apartments, 28 restricted to very low income families, 54 restricted to moderate income families, and 53 available at market rates. The project is located at 69155 Dinah Shore Drive, and was acquired and substantially rehabilitated using a bond issue in 1998.

Park David Apartments: is a 240 unit senior apartment project currently under construction at 27-700 Landau Boulevard. The project will consist of one and two bedroom apartments, available to very low income seniors.

Casas San Miguel: is a 40 unit project located in multiple buildings on and around Melrose Drive. The project is restricted to very low income disabled households. It was opened in 1998, using HOME, RDA and CDBG funds.

Self-Help Housing: The Coachella Valley Housing Coalition and Habitat for Humanity have completed 49 single family homes for very low and low income families throughout the City since 1993.

Mobile Home Parks

The Department of Finance estimates that 2,866 mobile homes are located in the City in 2000. Traditionally, mobilehome parks have provided an affordable housing opportunity, particularly for senior citizens. The long term preservation of these mobilehome parks, therefore, will have a direct positive impact on the City's lower income residents. Table III-26 provides a listing of the City's rent controlled mobilehome parks.

Affordable Housing Programs

City Programs

In addition to major rehabilitation and new construction funding, the City's Redevelopment Agency provides the following programs to eligible residents, and has assisted more than 700 households with these programs.

Community Home Improvement Program: Is available for qualified low income homeowners. The program can grant up to $5,000 per home for repair or improvements.

Sewer Hook-Up Assistance Redevelopment Program: This program is available to pay up to $1,725 toward Desert Water Agency hook-up fees for eligible households whose septic system fails.

Assessment District Financial Assistance: Low income homeowners can be reimbursed up to 100 percent of the sewer and street improvement assessment portion of their annual tax bill.

Bank of America Title 1 Loans: Allow for subsidized loans for home improvements without equity in the home.

County Programs

There are numerous programs available to provide rental assistance and to encourage the construction of new affordable housing. The following programs are available in the City of Cathedral City:

Section 8 Housing Assistance: The Riverside County Housing Authority provides HUD Section 8 rental assistance to lower income renters within the City. The Authority subsidizes 177 units in the City at this time, although the total number of vouchers and certificates fluctuates regularly.

Senior Home Repair: Very low income homeowners or mobile home owners of 62 years of age or more can qualify for grants of up to $3,200 to improve or repair their property.

Fair Housing Programs: The City has an agreement with the County of Riverside to provide a wide range of services for City residents. These services are designed to implement fair housing policies and procedures and to provide information concerning minority rights under existing fair housing laws.

Home Improvement Program: The County program allows loans of up to $25,000 for home improvements for qualifying households.

First Time Homebuyer Program: The program will establish a silent second for up to $20,000 for qualifying home buyers.

Future Housing Needs

Each incorporated City is required to analyze existing and projected housing needs and develop an implementation program to describe how the City will attain its housing goals. In addition, the projected housing need must include a locality's fair share of regional housing needs.

In 1980, AB 2853 was passed requiring all councils of governments to develop regional allocations of housing needs for all income levels. This includes a determination of current and projected housing needs for each county, as well as allocated totals for all cities within that county. The regional housing determination must be made by the appropriate council of governments, but may be revised by the local government if the revision can be supported by available data and accepted planning methodologies. In 1999, the Southern California Association of Governments prepared the Regional Housing Needs Assessment (RHNA) for the 1998 through 2005 planning period. The City of Cathedral City's allocation under RHNA is depicted below.

Table III-25
Cathedral City Regional Housing Allocation, 1998-2005

Income Category	Number of Units
Very Low	208
Low	142
Moderate	186
Above Moderate	329
Total	**865**

Affordable Units at Risk

Many of the federal programs used throughout the Coachella Valley during the past twenty-five years to subsidize rental and ownership housing have limits on the length of time affordability limitations were to be imposed. Federal mortgage revenue bond regulations also have limitations on the number of years affordability restrictions are required to remain in effect.

Recently, the earliest of these affordability restrictions have begun to expire. This problem, which may result from an early pay-off of project financing or a decision "to opt out" of Section 8 contracts, can have significant impacts on the communities in which these projects are located.

Tables III-26, III-27 and III-28 identify affordable housing units within the City. The table indicates that 342 units could be released from their restricted status before 2015. This includes 280 rental units and 62 owner-occupied units.

Table III-26
Restricted Affordable Rental Housing

Rental Housing Project	Units	Afford able to	Earliest Release	Type of Subsidy
Mountain View Apartments 68-680 Dinah Shore Drive	280 1-bedroom	Very low income seniors	2014	FmHA loan (515)
Corregidor Apartments 34-355 Corregidor	14 2 bedroom	Very low income families	None	Owned by County Housing Authority
Terracina Apartments 69-175 Converse Road	80 2-4 bedrooms	33 Very low & 47 low income families	2052	Income tax credits
Cathedral Palms 31750 Landau Blvd	230 Studio & 1 bedrooms	very low income seniors	2052	AHP, HOME, & RDA set-aside
Ocotillo Place 69155 Dinah Shore Drive	82 family units	moderate income families	2027	RDA restricted & income tax credits
Victoria Apartments 34475 Corregidor	49 1 bedrooms +manager	very low income seniors	2052	HUD 202
Coachella Valley Housing Corporation Special Needs Apartments 37155 Palo Verde	10 Studio & 1 bedrooms	very low income Special Needs	2053	HOPWA, HOME, Tax Credits, Supportive Housing Program, CDBG & RDA set-aside
Coachella Valley Housing Corporation Special Needs Apartments 68375 Tahquitz Drive	10 Studio & 1 bedrooms	very low income Special Needs	2053	
Coachella Valley Housing Corporation Special Needs Apartments 37095 Melrose	19 Studios, 1 & 2 bedrooms	very low income Special Needs	2053	

Source: Cathedral City Office of Housing Assistance, November 1998

Table III-27
Rent Controlled Affordable Mobile Home Park Spaces

Mobile Home Parks	Spaces
Caliente Sands	118
Cathedral Canyon Estates	310
Mahoney's/Maria's	75
Desert Sands	255
Desert Hills	67
Sky Ridge	73
Tramview	264
Total	**1,162**

Source: Cathedral City Office of Housing Assistance, November 1998
*Of the total 650 assisted units, only an estimated 450 meet all requirements for AB315 and 1290 inclusionary housing.

Table III-28
Restricted Affordable Owner-Occupied Units

Owner-Occupied Housing	Units	Affordable to	Earliest Release	Type of Subsidy
30 year Covenant with resale restrictions	450*	Very low to moderate income	2025	RDA loans/grants
15 year Covenant with resale restrictions (mobile homes)	58	Very low to moderate income	2009	RDA loans/grants
20 year Covenant with resale restrictions	4	Very low to moderate income	2010	RDA subsidized loans
30 year Habitat for Humanity Housing	7	Very low income	2025	RDA Habitat grants
30 year Covenant with resale restrictions CVHC conversion	32	Very low to low income	2025	Home Grant & RDA silent second
30 year Covenant on self-help homes	13	Very low income	2025	RDA/Silent Second
30 year Covenant on 1st Time Homebuyer grant	29	Very low and low income	2027	RDA Grant

Source: Cathedral City Office of Housing Assistance, November 1998

Potential Constraints to the Development of Housing

Potential constraints to the development of housing can include a broad range of issues. This section of the Housing Element examines the potential governmental constraints imposed by the City in the form of zoning, fees and other restrictions, and determines whether these are constraints to the provision of housing which should be addressed further in the policies and programs.

Development Standards and Land Use Controls

Development standards include the City's zoning ordinance, subdivision ordinance, and building code requirements. The City zoning ordinance is the most common tool used by the City to regulate the use of private land. Zoning regulates the use, density, floor area, setbacks, parking and placement and mix of residential, commercial, and industrial projects to reflect the community's development goals and objectives. Zoning also regulates the intensity of residential land use through minimum lot size requirements. The requirements of the City's Zoning Ordinance are listed in the Table below.

Table III-29
Residential Standards

Standard	R-1	R-2	RM	R-3	RH	RR
Units per Acre	6	11	15	20	24	7
Lot Area	7200 s.f.	4,000 s.f.	20,000 s.f.	30,000 s.f.	40,000 s.f.	5 ac.
Lot Width	70 ft	35 ft.	80 ft.	100 ft.	100 ft.	200 ft.
Lot Depth	100 ft	100 ft.	150 ft.	150 ft.	200 ft.	300 ft.
Building Lot Coverage	40%	50%	60%	60%	65%	20%
Private Outdoor Living Space	N/A	80 s.f.	400 s.f./unit	300 s.f./unit	300 s.f./unit	Varies
Building Height	26 ft.	26 ft.	26 ft.	35 ft.	35 ft.	26 ft.
Parking	2	2	1.5	1.5	1.5	1.5

Source: City of Cathedral City Zoning Ordinance

Clearly, the City's standards are not a constraint to the development of housing.

Construction Costs

Building costs do not appear to be unduly increased through local building codes. However, state regulations with respect to energy conservation, though perhaps cost effective in the long run, may add to initial construction costs.

Building codes regulate new construction and substantial rehabilitation. They are designed to ensure that adequate standards are met to protect against fire, collapse, unsanitary conditions and safety hazards. The City has adopted the Uniform Building Code, which is typical of all local jurisdictions in California.

Fees and Processing Times

The City's Planning and Building Division fee schedules have been established as enterprise funds, to recapture the City's cost of processing the applications. The time spent on each application is tracked, and deposits returned to the developer if the time is not spent on the application. As such, the Planning and plan check fees imposed by the City are reasonable and do not represent a significant impact on the cost of construction. Fees for plan check and building permits are determined based upon the valuation of the structure. Development impact fees are listed in Table 30, And represent a total cost of about $3,000 per housing unit.

Table III-30
Development Impact Fees

Fee Purpose	Area of the City	Fee
Park land acquisition/improvements	Specific Plan 89-37	$2,979.00 per acre
Park/drainage basin acquisition/improvements	Specific Plan 89-40	$4,319.00 per acre
Park and school land acquisition	Specific Plan 9-46	$973.52 per acre
Park improvement	Specific Plan 9-46	$1,057.36 per acre
Transit Development Fee (transit stop improvements)	Citywide	$5.00 per lineal ft arterial streets
Master Undergrounding Plan (MUP) undergrounding overhead utilities	Citywide	$0.15 per sf bldg area
Fire and Police Facilities and Equipment Fund and Traffic signalization Fund	Citywide	$150-$450 per 1,000 sf bldg area
Street Improvement Fee	Citywide	$1,424-$4,000 per project

Source: Planning Division

In addition, the Palm Springs Unified School District also assesses new development projects based on the project's estimated student generation.

The City requires site plan review for all multi-family projects, which can be processed concurrently with any other permit which might be required. The average processing time for a typical application is 3 to 4 months, which is somewhat less than many Valley cities, and does not represent a constraint. Single family homes do not require site plan approval, and are checked by the Planning Department as part of the usual plan checking process.

Code Enforcement

The City's Code Enforcement efforts are operated through its Fire Department. A land owner is generally warned three times of a violation, prior to the initiation of a citation and associated court action.

The Department makes every effort to give as much time as possible to a violator to correct the problem. Depending on the severity of the offense, a warning will be accompanied with a deadline of 10 to 30 days for rectification.

The City's Code Enforcement Department also actively participates in assisting low income households in improving their properties through the "Paint the Town" program, which allows such households to receive the paint for their homes at no charge.

Non-governmental Constraints

Various factors not under the control of local government also affect the cost, supply and distribution of housing. These factors include land costs, construction costs, financing costs, speculation, availability of infrastructure, and physical constraints.

Land and Construction Costs

Land costs include the costs of raw land, site improvements, and all costs associated with obtaining government approvals. Building and construction costs for residential development in Cathedral City range between $65 and $85 per square foot. Fully-developed, ready-to-build single family lots are currently available at prices ranging from $5,000 to $20,000 depending on the size and location.

The cost of a newly-constructed home in Cathedral City is between $100,000 and $300,000. Existing homes for resale are generally priced between $85,000 and $200,000. This price range makes Cathedral City affordable to a large segment of the population, and has been the reason for its rapid expansion as a young family community.

Financing Costs

Financing costs impact both the purchase price of the unit and the home buyers ability to purchase. Interest rates fluctuate in response to national factors. Currently relatively low (7.75% to 9%), they can change significantly and substantially impact the affordability of the housing stock. However, the City has implemented a First Time Home Buyer's program to assist in the purchase of a home for low and very low income households. There are no known mortgage deficient areas in the City. Financing for both construction and long term mortgages is generally available subject to normal underwriting standards.

Infrastructure

Another factor adding to the cost of new construction is the cost of providing adequate infrastructure, major and local streets, curbs, gutters, sidewalks, water and sewer lines, street lighting, which is required to be built or installed in new development. In most cases, these improvements are dedicated to the City, which is then responsible for their maintenance. The cost of these facilities is borne by developers, added to the cost of new housing units, and eventually passed onto the home buyer or property owner.

The City's development patterns have resulted in the construction of major arterials throughout the City. The development community generally does not have to extend major new roadways or other infrastructure in order to develop housing.

The City requires, as do all communities in California, that a developer be responsible for all on-site improvements. Driveways within a project are required to be 24 feet in width. Local streets within a project are generally 36 feet in width, with curb, gutter and sidewalk.

Off-site improvements, should they be required, are also the responsibility of the developer. If a public street is required, the developer will be responsible for a half width improvement, including curb, gutter and sidewalk, as is typical in most communities. Since most of the cities major streets have been improved to their ultimate right-of-way, development of residential projects will generally only require the improvement of local or collector streets.

As previously stated, there are a total of 2,145 existing infill lots in existing neighborhoods which are available for the construction of housing. These lots are all serviced by the required infrastructure

Physical Constraints
Most of the area south of I-10 poses few physical constraints to development. The land is flat, urbanized, and the soils are suitable for urban uses. Areas north of the freeway are subject to physical constraints such as steep slopes and flooding. Environmental constraints and physical constraints to development are further addressed in the Environmental Resources and the Environmental Hazards chapters of this document.

Special Housing Needs

Certain households because of occupation, income, health, or physical challenges may have identifiable special housing needs.

Farm Workers
Although not known to be an agricultural city, the 1980 Census data showed approximately 5% of the persons residing in the Cathedral City labor area were employed in the categories of agriculture, forestry and fisheries, with that number increasing to 5.6% in the 1990 Census data. The category, however, includes persons such as golf course maintenance workers and gardeners, who do reside in the City. The United Farmworkers, however, are not aware of any farm workers being housed in Cathedral City.

Farmworker households generally fall into low and very low income categories. However, as with all special needs, the City provides the opportunity for farmworker households to obtain rental subsidies, and also provides incentives for developers to maintain affordable units which are available to all segments of the community.

Homeless
Homelessness is a difficult issue to quantify. The homeless are generally mobile, often crossing from one city or county into another. The mild winter climate in the Coachella Valley may attract the homeless in those months. Hot summer temperatures encourage the homeless to seek daytime shelter in air conditioned places such as libraries, malls, and other buildings open to the public.

The primary provider of services to the homeless in the Coachella Valley is Catholic Charities, a non-profit, nondenominational organization. Catholic Charities and the Housing Authority of the County of Riverside operate Nightingale Manor, a 14-unit emergency shelter for homeless families. The shelter is located in Palm Springs, but serves families from the entire Coachella Valley region. Casa San Miguel provides 24 units for potentially homeless persons. In addition,

Shelter from the Storm, a women's shelter, provides temporary housing throughout the Valley for abused women and their children.

Primary reasons for homelessness presented to Catholic Charities include sudden job loss, illness and lack of medical insurance, family break-ups such as divorce, and seasonal job layoffs or reduction in hours. Catholic Charities reports Nightingale Manor shelters approximately two hundred families per year. In addition to providing shelter, Catholic Charities offers a range of social services from counseling to distribution of bus passes.

Other groups of homeless individuals not served by the facility at Nightingale Manor include the mentally ill, those with chemical dependencies, and those who voluntarily choose a transient lifestyle. These individuals may be served by the Coachella Valley Rescue Mission, located in Indio, or by the Emergency Cold Weather Shelter, located at the National Guard Armory in Indio, in the winter months. However, these facilities provide only emergency shelter and do not deal with the causes of homelessness.

A survey with the Police Department in Cathedral City and neighboring cities indicates that in general, Cathedral City has less of a problem than the cities of Palm Springs, Indio and Coachella. It is estimated that approximately 15 to 20 people are living on the streets in Cathedral City.

Elderly

In 1980 the percentage of Cathedral City's population that was 65 years of age or older was 22.6%. The 1990 Census showed a decrease to only 13.9% of the population being 65 or older, representing a total of 4,182 persons. Although the percentage of elderly residents decreased, the City's percentage was still slightly higher than the County average of 13.2%. The higher proportion of elderly residents is likely to continue, with the Coachella Valley's reputation as a retirement area and the City's affordable housing costs.

Affordability can be an issue of special concern to the elderly, who are often on fixed retirement incomes. In addition, the elderly may require assistance with housekeeping, maintenance, and repairs to remain in their own homes as long as possible. Special design features that may be needed include elimination of barriers such as steps and the provision of recreational and social amenities.

As the elderly become less independent and require more care, a continuum of housing options becomes important, ranging from independent unassisted living, to congregate or board care facilities which provide meals, maid service, and social opportunities, to nursing care facilities which provide complete medical care.

The 1990 Census indicates 3,174 households in Cathedral City receive Social Security. The mean income for these households was $8,510, well below the very low income category. Census data also show 1,650 households received retirement income. The mean income of these households was $9,457.

The City has a number of projects and programs available for the senior population, as enumerated in Table 30, above. Also available to seniors and handicapped are free smoke alarms and fire inspections provided courtesy of the Fire Department and the Office of Housing Assistance.

Handicapped

The 1989 CVAG Regional Housing Needs Analysis, based on 1980 Census data, estimated 800 handicapped individuals reside in Cathedral City. The 1978 Special Census has also provided a basis, estimating 15.8% of all households within City boundaries to have at least one member who is handicapped or has a disability.

The City has 39 units of housing specifically designed for disabled persons, as well as two apartment projects which accept both senior and disabled residents. The City adheres to State guidelines regarding handicap access, etc., and promotes the use of architectural design techniques which aid the disabled.

The Americans with Disabilities Act requires all new multi-family construction include a percentage of units accessible to the handicapped. The City of Cathedral City monitors and requires compliance with these standards as part of the Building Permit review, issuance, and inspection process.

Single Parent Families and Female Headed Households

Female headed households tend to be predominantly a low income group. Compared to other households, this group:

- Has low incomes and high poverty rates
- Pay high percentages of income for housing
- Has a low home ownership rate
- Has high rates of overcrowding
- Head of household is younger than the median age for head of household, except for seniors on Social Security

The 1990 Census indicated there were 1,483 children under 18 years of age in Cathedral City living in families whose incomes are below the national poverty level. Of these, 596 (40.2%) lived in female headed households.

Primary housing needs for these single-parent households include affordability and units of appropriate size.

Large Families

The 1990 Census indicated there were 1,643 households in Cathedral City with five or more members, accounting for nearly 11% of the households in the City. Some of these households are due to the consolidation of multiple families, which have shared housing to reduce housing costs. If these consolidated family units could each obtain affordable housing, large units would not be necessary in some cases.

Large families such as these have a special need for three, four, or more bedroom units. Units of this size, affordable to low and moderate income households, are limited, but are provided at Terracina apartments.

Quantified Objectives

A number of housing units in the City are of older construction, and require either rehabilitation or conservation in order to maintain them as viable housing for the City's population. As such, the City has implemented programs, as discussed above, to provide funding and assistance in the rehabilitation of housing units. Areas of particular concern include the Downtown, the Whitewater neighborhood, and the neighborhood north of Dinah Shore Drive, and west of Date Palm Drive.

Table III-31
Quantified Objectives Matrix (1998-2005)

Income Category	Very Low	Low	Moderate	High	Total
New Construction	208	142	186	329	**853**
Rehabilitation	50	50	50	0	**150**
Conservation	20	20	0	0	**40**

The City's rehabilitation and conservation objectives will be funded through the implementation of Redevelopment Agency funding programs, as discussed below.

Redevelopment Agency Funding

The Redevelopment Agency of the City of Cathedral City receives $2,400,000 annually in housing set-aside funds. The City has set goals for the expenditure of housing set-aside for the period from 1999 through 2004 by completing its Redevelopment Implementation Plan.

For the period from 2000 through 2004, the City has estimated $545,000 annually for neighborhood revitalization and rehabilitation; with an estimated cost per unit for substantial rehabilitation of $25,000, and an average cost per unit for more modest projects at $6,000. This estimated amount will also be utilized for crime-free neighborhood protection and code enforcement activities. Altogether, 40 units are expected to be assisted annually through this funding source.

The City has estimated $250,000 annually for land acquisition for the period from 1999 through 2004. The Agency has also projected the expenditure of $75,000 annually for a First Time Homebuyer program in 2000-2001 and 2001-2002, assisting 60 households during that time period.

Energy Conservation

The hot summer climate in Cathedral City and the need for cooling makes energy conservation particularly important. Title 24 Building Code requirements require energy efficiency in all new construction of housing though design features, insulation, and active solar devices.

An unfortunate side effect of requiring energy efficient new construction is an increase in the cost of construction of new housing. When evaluating energy efficiency standards above and beyond the State-mandated Title 24, local jurisdictions must balance the increase in the cost of housing with the reduction in monthly utility bills for the user.

Land use patterns also impact energy conservation. Infill and concentrated land use patterns minimize travel time and distance to work and shopping destinations and reduce the cost of providing utilities/infrastructure and public services. Mass transit is most efficient when traveling major corridors that link population centers and employment centers. More rural land use patterns discourage mass transit and alternative modes of transportation such as buses in favor of automobiles, contributing to energy consumption.

Public Participation

As part of the preparation of this Housing Element, the City has conducted City Council study sessions, public workshops, and Planning Commission and City Council hearings to review the goals, policies and programs included in this element. The public participation program was fully advertised, and special flyers were distributed to stakeholders in the City and the Valley as a whole. Flyers were sent to the Coachella Valley Housing Coalition, the Desert AIDS Project, the Housing Authority, and others who have expressed an interest in housing issues in the City.

GOALS POLICIES AND PROGRAMS

Goal 1

A broad range of housing types located in all the City's neighborhoods, which meets the needs of all existing and future households.

Goal 2

Redevelopment Agency Housing Fund expenditures to cost-effectively provide affordable housing for very low, low and moderate income households.

Goal 3

The maintenance and rehabilitation of the City's residential neighborhoods.

Policy 1
Ensure that the quality of dwelling units in existing neighborhoods is improved, conserved, rehabilitated and maintained.

Program 1.A
Maintain the Community Home Improvement Program (CHIP), Assessment District Financial Assistance Program (ADFAP) and the Sewer Hook-up Assistance Redevelopment Program (SHARP), allowing grants and loan assistance programs for qualifying very low, low and moderate income households in order to encourage the rehabilitation of existing housing units.
Responsible Agency: Redevelopment Agency; Office of Housing Assistance
Schedule: Annual budget allocations.

Program 1.B
All City codes, including the Uniform Building Code, will be enforced in the City so that existing units are maintained in good repair.
Responsible Agency: Planning Department; Fire Department
Schedule: On-going.

Program 1.C
Develop a rehabilitation and neighborhood revitalization plan for that area north of Dinah Shore Drive, generally west of Date Palm Drive, known as the Whitewater neighborhood, which targets short, medium and long range plans for the rehabilitation of existing duplexes, and the development of quality single and multiple family housing.
Responsible Agency: Redevelopment Agency; Office of Housing Assistance; Planning Department.
Schedule: 2001-2002.

Program 1.D
Identify existing neighborhoods with substandard infrastructure, including partially paved roads, substandard water lines, flooding problems, absence of sewer service and lack of street lighting, quantify the need for improvements and identify funding sources.
Responsible Agency: Planning Department; Public Works
Schedule: 2001-02

Program 1.E
The Code Enforcement Department shall continue its Target Areas program in existing neighborhoods, to maintain and upgrade living conditions in those neighborhoods with serious endemic problems (Downtown, Cove, Whitewater and Dream Homes).
Responsible Agency: Code Enforcement Department
Schedule: On-going

Policy 2
Ensure that sufficient residentially designated lands and appropriate zoning exist to meet the City's future housing needs.

Program 2.A
Maintain the inventory of all land suitable for residential development in the Land Use Element.
Responsible Agency: Planning Department
Schedule: On-going

Program 2.B
Maintain land use and zoning designations in the General Plan and zoning maps, respectively, that allow for diversity of housing types and densities.
Responsible Agency: Planning Department
Schedule: On-going

Program 2.C
Maintain a Planned Unit Development (PUD) permit ordinance which shall allow flexibility in development standards to encourage housing construction while preserving natural resources.
Responsible Agency: Planning Department
Schedule: On-going

Program 2.D
Specific Plans with residential components, PUDs and Tentative Tract Maps shall provide for affordable housing within the project, or shall contribute an in-lieu fee toward the provision of off-site affordable housing. The standards shall be included in the City's Zoning Ordinance.
Responsible Agency: Planning Department
Schedule: 2001-2002; On-going as Specific Plans are submitted

Program 2.E
Encourage infill development and the remodeling or addition to existing homes wherever possible, to lower the costs of extending infrastructure, through the use of incentives such as Community Home Improvement Program grants.
Responsible Department: Redevelopment Agency
Schedule: On-going

Program 2.F
Ensure that in-fill development occurs in areas with adequate infrastructure, including streets and water and sewer lines, to support build-out of the neighborhood,.
Responsible Department: Planning Department
Schedule: Continuous

Program 2.G
Develop innovative housing solutions for very low and low income households and the elderly.
Responsible Department: Planning Dept.
Schedule: 2002-2003

Policy 3
Provide a sufficient variety of housing types to meet the housing needs of all residents, regardless of race, religion, sex, marital status, ancestry, sexual orientation, national origin or color.

Program 3.A
Projects which restrict 25% or more of their units to very low or low income households for 30 years shall qualify for a density bonus of 25%, pursuant to State law, over the underlying zoning designation.
Responsible Agency: Planning Department
Schedule: On-going.

Program 3.B
Maintain the City's database of affordable housing projects and units, and the Housing Replacement Plan, and develop action plans should these units be converted or destroyed.
Responsible Agency: Office of Housing Assistance
Schedule: 2001-2002.

Program 3.C
Work with private organizations -- including the Coachella Valley Housing Coalition, Shelter From the Storm, the Senior Center, Desert AIDS Project, Foundation for the Retarded or Braille Institute -- in assisting whenever possible in the housing of handicapped residents or those with special housing needs in the City.
Responsible Agency: Planning Department, Office of Housing Assistance
Schedule: 2002-2003

Program 3.D
The City shall enact an Ordinance which enables the City Council to waive or subsidize application and building permit fees for very low, low or special needs projects.
Responsible Agency: Planning Department
Schedule: 2001-2002

Program 3.E
Continue to enforce the provisions of the Federal Fair Housing Act. All complaints regarding discrimination in housing will be referred to the Riverside County Office of Fair Housing. Information on the Fair Housing Act, as well as methods of responding to complaints shall be made available at City Hall and at the Library.
Responsible Agency: Office of Housing Assistance
Schedule: On-going

Program 3.F
Maintain provisions for the development of homeless shelters and transitional housing as a conditional use in the Zoning Ordinance.
Responsible Agency: Planning Department
Schedule: On-gong

Program 3.G
Work with the Coachella Valley Association of Governments toward a regional solution for homelessness.
Responsible Agency: Planning Department
Schedule: On-gong

Policy 4
In order to leverage local investment, promote and facilitate the use of State and federal monies for the development and rehabilitation of affordable housing in the community.

Program 4.A
The City shall encourage and assist a self-help housing fund by non-profit organizations for single family, infill development through the Redevelopment Agency.
Responsible Agency: Redevelopment Agency
Schedule: 2001-2002

Program 4.B
The City shall continue to process requests for information on zoning, financial assistance programs, or required supporting documentation for State and federal grant or loan applications within 30 days of receipt. When conditional use permits or development review is required prior to application submittal, the City shall fast-track such applications to ensure that submittals are not delayed, assuming a timely submittal by the developer.
Responsible Agency: Planning Department; Redevelopment Agency
Schedule: 2000-2001; On-going

Program 4.C
Continue to distribute the City's information for developers and low income households which detail the programs available to both parties for assistance in the development and rehabilitation of low income housing.
Responsible Agency: Redevelopment Agency; Office of Housing Assistance
Schedule: On-going

Program 4.D
Should the City be notified of intent to sell any at-risk affordable housing developments, all possible funding sources, including CDBG and RDA housing set-aside funds will be considered to facilitate purchase of such a project. All non-profit organizations which have expressed an interest in purchasing such projects, including the Riverside County Economic Development Agency Housing Authority and other non-profit groups will be notified immediately of any such properties for sale.
Responsible Agency: Redevelopment Agency; Office of Housing Assistance
Schedule: Ongoing.

Program 4.E
Identify and maintain a database of infill lots throughout the community which would be appropriate for the development of affordable housing, including self-help ownership housing. Promote these parcels in the development community, through brochures, potential streamlined processing incentives, and other means.
Responsible Agency: Planning Department; Office of Housing Assistance
Schedule: 2000-2001

Policy 5
Promote and preserve mobile home parks for their value as low and moderate income housing opportunities.

Program 5.A
Any conversion of existing mobile home parks to permanent housing will continue to be regulated by ordinance to ensure that an appropriate relocation plan for park residents is developed and implemented.
Responsible Agency: Planning Department
Schedule: Immediate; Continuous.

Program 5.B
Maintain a mobile home rent control ordinance which protects all mobile home residents who do not have long-term lease agreements.
Responsible Agency: Office of Housing Assistance
Schedule: On-going

Policy 6
Continue to redevelop the Downtown with a mix of higher density housing.

Program 6.A
The Redevelopment Agency will continue to pursue prototype higher density housing in the Downtown area, to further the concepts of mixed use, urban core presented in the Downtown Precise Plan.
Responsible Agency: Redevelopment Agency, Planning Department
Schedule: 2001-2002; On-going

Policy 7
The City shall encourage crime-free housing programs for all projects constructed in the City.

Program 7.A
All projects shall be reviewed by the Police and Fire Departments to ensure that adequate security and 'defensible space' is provided.
Responsible Agency: Planning Department; Police and Fire Departments
Schedule: On-going

Program 7.B
The Redevelopment Agency shall consider establishing a policy for Crime-Free Housing, and on-site management of any project for which the Agency provides funds or assists in any way.
Responsible Agency: Redevelopment Agency
Schedule: On-going

Policy 8
Ensure that new and rehabilitated housing is efficient in its use of energy and natural resources.

Program 8.A
Ensure that new development and rehabilitation efforts, whenever possible, maximize energy efficiency through architectural and landscape design and the use of renewable resources and conservation. Set aside funds shall be considered for projects which provide high levels of energy conservation for affordable housing.
Responsible Agency: Planning Department; Office of Housing Assistance
Schedule: On-going

Policy 9
Encourage the development of appropriate unit sizes in affordable multi-family rental projects and granny flats on single family lots in order to alleviate overcrowding.

Program 9.A
Encourage multi-family rental and owner-occupied projects which include three and four bedroom units as a portion of the overall development. Larger units shall be encouraged through direct RDA participation or through bond financing for affordable housing through the County Housing Authority or other appropriate means.
Responsible Department: Planning Department; Redevelopment Agency
Schedule: 2000-2001; On-going

Policy 10
Facilitate the development and preservation of senior housing through incentives and assistance programs.

Program 10.A
Maintain the Senior Home Repair Program to encourage maintenance and rehabilitation of existing housing units for the elderly.
Responsible Agency: Redevelopment Agency
Schedule: On-going

Program 10.B
In older neighborhoods where low and very low income seniors are a significant portion of the residents, consider the assignment of bond proceeds for the improvement of streets, water and flood control improvements to bring these facilities into compliance with current standards.
Responsible Agency: Redevelopment Agency; Planning Department
Schedule: On-going

Policy 11
High density, affordable and senior projects shall be located with convenient access to shopping, public transit, and school and park facilities.

Program 11.A
Require developers of affordable and senior housing projects to confer with SunLine Transit regarding the provision of service to the project.
Responsible Agency: Planning Department
Schedule: Continuous

Program 11.B
Ensure that affordable and senior housing projects are located in areas with adequate public improvements, including streets and sidewalks.
Responsible Agency: Planning Department
Schedule: Continuous

Policy 12
As part of its mandated annual review of the General Plan, City staff shall include an analysis of the consistency of the Housing Element with the rest of the General Plan.

PARKS AND RECREATION ELEMENT

PURPOSE

Abundant parkland and recreational facilities in the City and its vicinity are key elements to the quality of life enjoyed by the residents. Parklands and related spaces not only provide recreational opportunities for residents and visitors, but also help to develop and enhance the City's character and image. Parks and recreational areas are people-centered places that work to invigorate the physical, mental and spiritual health of the community's residents. They create focal points for neighborhoods and communities to gather, creating a sense of place and significance within the City. The purpose of this Element is to recognize the importance of parks and recreational areas, and to guide their expansion and improvement throughout the City. This Element also includes a section on bikeways and trails, an essential component of the park and recreation system within the City, and an additional amenity for its residents. The development of a cohesive system of bikeways and trails can enhance the quality of life and add to recreational opportunities. The goals, policies and programs set forth in this element help to plan for and provide sufficient parkland and recreational space that reflects and is responsive to the needs of the City.

BACKGROUND

The Parks and Recreation Element is directly related to the Land Use and Open Space and Conservation Elements in the designation and preservation of recreational open space areas. It is also related to the Community Image and Urban Design Element in its integration of pedestrian access and recreational areas. Parks and recreational facilities also play an important role in attracting new residents and tourists, a key to economic growth, and provide a direct link to the Economic Development Element. It is also related to the Noise and Circulation Element in its use of natural buffers, trails and open space to enhance the natural resources of the community.

Government Code Section 65560 requires that the General Plan include discussion of areas particularly suited for parks and recreational purposes, including areas with links between major recreation and open space reservations, trails, and scenic highways. Section 65561 states that the preservation of park land is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the enjoyment of scenic beauty and recreation. Government Code Sections 66477 and 66479 enable local governments to require park site dedications, or fees in lieu of dedication, as conditions of subdivision and parcel map approval, if the recreational facilities are consistent with the General Plan. Trail designations are also required as part of Section 5076 of the Public Resources Code.

PARKS

Parks are public spaces that serve a variety of functions in a community. While parklands are generally provided for recreational opportunities, they can transcend simple recreational uses. They provide a pleasing contrast to an urban environment, by breaking up the monotony of high-density office, commercial and residential areas. They offer a place for social and cultural activities, enriching and promoting the community's sense of place. Parks provide for the physical and mental development of the City's youth, through the organization of team sports and competitions. Parks are also utilized to display public art and special landscaping designs, which help to improve the community's physical attributes.

Park design should incorporate such elements as diverse activities and uses, access and linkage, comfort and image, and sociability. A park with a wide range of amenities and activities can attract a broader range of people and make a more dynamic and interesting setting. While recreational amenities are a key component, it is important to also provide for other uses, including, but not limited to cultural and social activities. A park should also be easy to see and easy to get to. If a park is easily accessible and linked to main areas within a community, then it will be used more frequently. Comfort and image is another element that a park's design should consider. The details within the park should welcome people and include design amenities that offer shade, a comfortable place to sit, and a pleasant and attractive environment. Lastly, a park should be a sociable place where people can go to observe the passing scene, meet friends and have fun with a wide range of people. Above all, parks should function as people places that bring residents together.

Service Providers

Parks and recreation services within the City of Cathedral City are provided by the Cathedral City Parks and Recreation Division. The Division provides guidance in the operations of the City's park facilities and recreational programs. The Division operates a variety of recreational programs, including after school camp programs, off track programs and special events. In addition, the Division provides active recreation programs, including karate, dance, physical fitness and crafts instruction through contract instructors.

While schools are not recreation providers, they can help to provide park facilities for public use in a community. Joint-use facilities enable the public to utilize a school's existing space and equipment for passive and active recreation. Palm Springs Unified School District currently (2001) provides for one joint-use park facility within the City (this facility is further discussed below). School facilities are a good resource to use in helping to meet the recreational demands of the community, and joint use agreements should be pursued in more school locations throughout the City.

Park Classifications

Mini Parks, Pocket Parks and Plazas

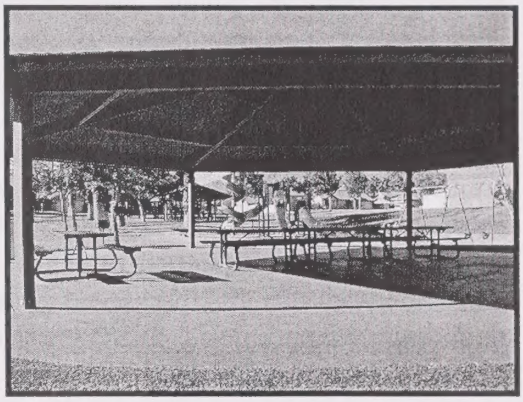
Mini parks, pocket parks, and plazas are less than three acres in size, and are typically used for limited, isolated or unique purposes. Facilities vary depending on the location and function of the park, but generally they are not designed for structured or organized play. In addition to the

traditional residential setting, mini parks, pocket parks and plazas may be situated in office, business or commercial centers, and utilized as a space for rest, relaxation and socializing. This use of space can also contribute significantly to community design by adding aesthetic appeal with public art and landscape design, and by providing greenbelts in urban areas.

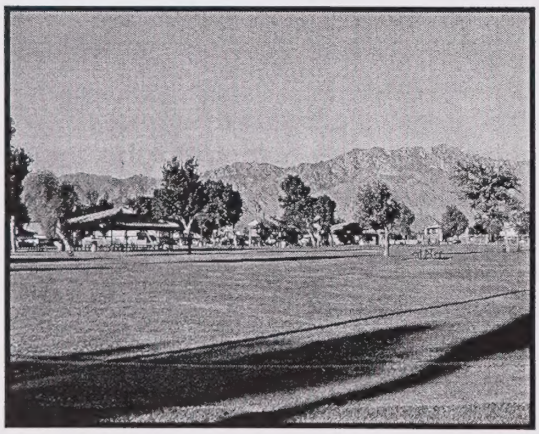
Mini parks or pocket parks can often be located in high-density residential development, taking the form of grassy areas or children's play lots. Because of their small size and specialized or limited activity areas, mini parks, pocket parks and plazas do not count towards meeting the active recreational needs of a community. However, they make good use of a small space, and offer various benefits to the community. Mini parks, pocket parks and plazas contribute to a well-rounded community park system, and should be encouraged as opportunities arise.

Neighborhood Parks

Neighborhood parks remain the basic unit of the park system. They are devoted primarily to a small portion of the City, serving the recreational and social needs of a neighborhood. Neighborhood parks are designed for active and passive recreation, and are generally located within walking and bicycle distance of residences. Park facilities are usually oriented toward the recreational needs of children, but may also include volleyball courts, half-size basketball courts and picnic and play areas that serve all age groups. Restrooms or off-street parking are usually provided.



Century Park



Panorama Park

The size of neighborhood parks is dependent on the available land and its relationship to neighborhood residences, but is generally five to ten acres, serving an area within a 1.5 mile radius. Neighborhood parks are an important feature within a community, and should be designed to provide for a wide range of leisure and recreational activities. In particular, they should serve as a focal point within a neighborhood, attracting nearby residents and visitors for social activity, special events and to help develop a sense of community. It is also important to locate neighborhood parks on quieter local streets, to facilitate access and improve safety.

Community Parks

Community parks serve all ages, and may include facilities for low-intensity or passive recreational opportunities, lighted fields, tennis and sports courts, swimming pools and areas or buildings for community festivals and civic events, as well as for organized indoor sport and athletic competitions. Generally, restrooms and off-street parking are provided. While community parks serve larger areas of the City than do neighborhood parks, they often also

fulfill a neighborhood function. Community parks are usually 20 acres or larger, and designed to serve an area within a 5 mile radius.

School Parks
This classification consists of parks or playgrounds built adjacent to but separate from educational facilities that may serve either a neighborhood or a larger area. Parks on school grounds are usually equivalent to neighborhood parks (as described above), but may also include sports fields for soccer or baseball. Establishing a joint-use agreement with the school district will help the City meet its demand for parklands.

Regional Parks
Regional parks are usually at least 50 acres in size and serve the entire City or region. While regional parks can provide for varying intensities of recreational activity, a portion of the park is generally maintained in a natural setting for passive recreation use or preservation of the environment. Facilities within regional parks are similar to those in community parks, often on a larger scale, or including active or organized recreational activities which would not fit in a community park.

Existing Park Facilities
There are currently five parks within the City and its planning area, all of which are classified as neighborhood parks. The following Table lists each park, its classification, size and ownership status, and the amenities it offers.

Table III-32
City of Cathedral City Parks Inventory

Park Facility Name	Parkland Classification	Acreage	Owner/ Administrator	Amenities
Panorama Park	Neighborhood	7.5	City	1,2,3,4,5,6,7, 8,9,10,11,12,
Agua Caliente Park	Neighborhood	6	School District	1, 2, 3, 5, 6, 7, 8, 12
Patriot Park	Neighborhood	6	City	6, 8,12
Century Park	Neighborhood	5	City	1,2, 3, 4, 6, 7, 8, 10, 12
Second Street	Neighborhood	2.5	School District	1, 3, 4, 5, 7, 8, 10,12

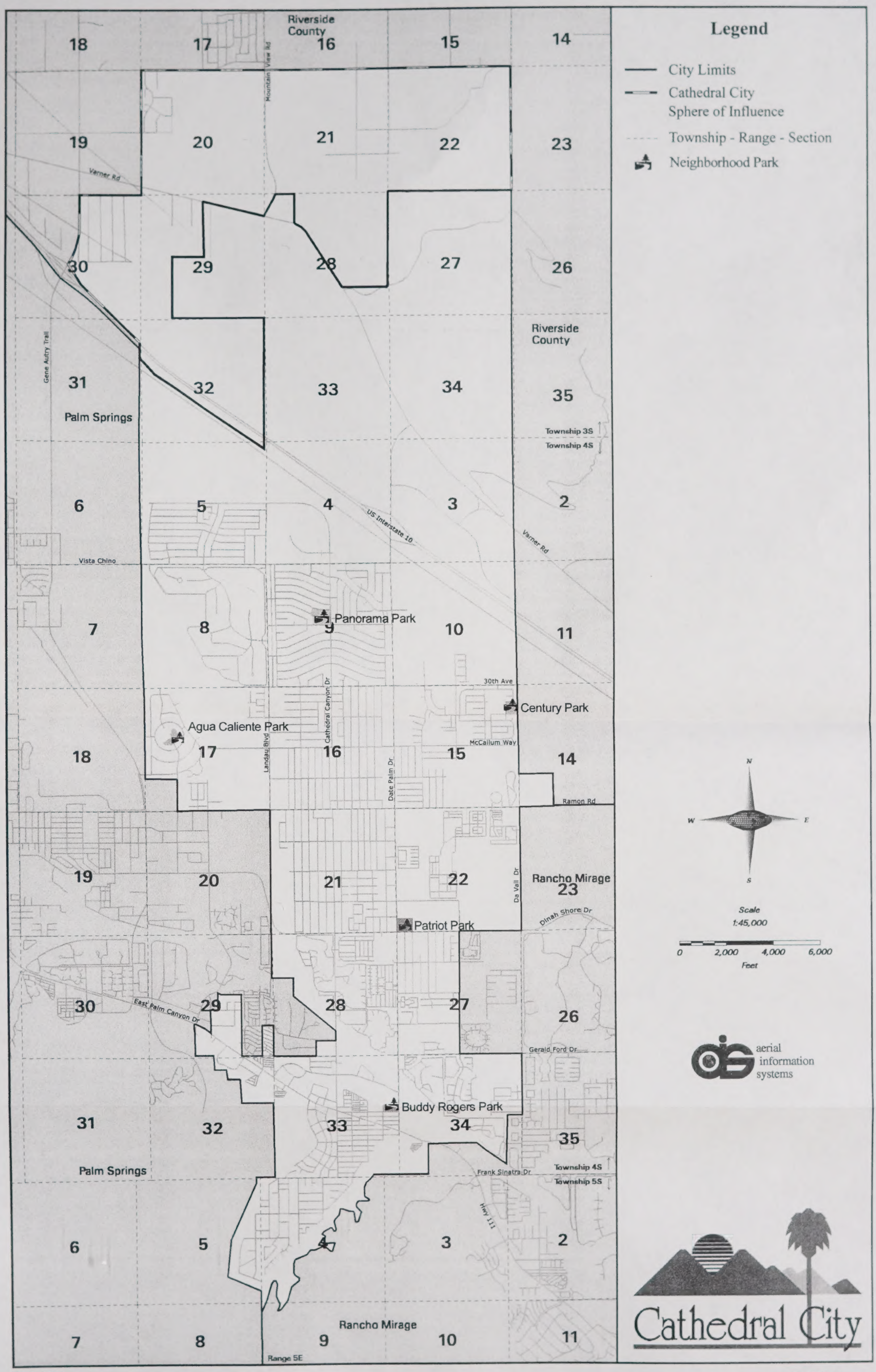
1= BALL FIELD	4= TENNIS	7= PLAYGROUND	10= RESTROOMS
2= BASKETBALL	5= SOCCER FIELDS	8= PICNIC AREA	11= JOGGING TRACK
3= VOLLEYBALL	6= OPEN GRASS/TURF	9= SPRAY POOL	12= SHADE STRUCTURES

Additional Facilities

The Cathedral City Parks and Recreation Division also operates a community center that offers a variety of recreational and educational opportunities to the City's residents. The center includes rooms for classes, a pool table and other games, a fully equipped kitchen, bathroom facilities and a gated patio area. The Center offers an off track program for children 6-12 years of age, Monday through Friday. The off track program offers a structured environment for activities such as arts and crafts, sports, games, field trips and movies. The Center also offers an after-school camp that features similar activities. The Community Center also holds a variety of classes for adults, as well as rented space for parties or gatherings. The City is also home to the Cathedral City Boys and Girls Club, which provides after school and other programs for children in the community. The Club is located on Whispering Palms Trail. Finally, the opening of the Town Square and Fountain of Life has resulted in recreational opportunities of many kinds, including a water play area at the fountain, and a number of special events on the square.

Although private recreational facilities should not be relied upon to meet the City's recreational needs, they do make up a significant portion of recreational opportunities throughout the Valley. Big League Dreams Sports Park is located within the City, adjacent to Cathedral City High School. The sports park complex features facilities for a variety of team sports and activities. It includes five softball/baseball fields, and facilities for basketball, roller hockey, soccer, flag football, and volleyball, as well as a restaurant, multi-purpose fields, batting cages, a sporting goods store and instructional schools. During the week, the park hosts league games for local athletes of all ages, and on the weekend hosts tournaments with teams from around the world. In addition, Big League Dreams hosts televised celebrity sports events, corporate gatherings and picnics, instructional camps and clinics, fantasy camps, 10K runs, car shows, sports memorabilia shows, concerts and church outings. Other commercial recreational activities in the City include the Boomers facility, which provides miniature golf, bumper cars and arcade games for children and adults.

Golf courses also contribute significantly to the recreational opportunities of the Valley. While the majority of golf courses are associated with resort residential development in the City, they are used frequently by residents and visitors throughout the Valley. The City is home to the Cimarron, Cathedral Canyon Country Club, Date Palm Country Club, Outdoor Resorts and Desert Princess golf courses, which all are accessible to the public. It is also important to note that golf courses are an integral part of the City's and region's economy.



TERRA NOVA®
Planning & Research, Inc.

City of Cathedral City
General Plan
Parks in the Planning Area

Exhibit
III-8

Parks Planning

A fundamental component to parks planning is to assess the needs of community. A local needs analysis should take into account the particular demographic characteristics of Cathedral City residents and visitors, and should be adjusted for any opportunities or limitations that exist or may occur in the future. The main objective is to identify areas where parks are needed and to develop definitive standards and policies for meeting the desired conditions. Quimby Act standards are frequently used to determine the adequacy of parkland provided in a community.

The Quimby Act (Government Code Section 66477), a section within the Subdivision Map Act, allows local governments to adopt an ordinance to require the dedication of land or payment of fees for park and recreational purposes. However, before such a condition can be validly attached to the approval of a map the following criteria must be met:

- The ordinance must be in effect for a period of thirty days before filing tentative or parcel map
- The ordinance must include definitive standards for determining the proportion of the subdivision to be dedicated or the amount of the fee to be paid. The dedication or payment shall not exceed a proportionate amount necessary to provide three acres of park per 1,000 subdivision residents.
- The land or fees are to be used only for the purpose of developing new or rehabilitating existing park or recreational facilities to serve the subdivision.
- The city must have a general plan or specific plan containing policies and standards for park and recreational facilities in accordance with definite principles and standards.
- The city shall develop a schedule specifying how, when and where it will use the land or fees to develop park and recreational facilities.
- Only the payment of fees may be required for subdivisions containing fifty parcels or fewer.

Based on the City's current population, which the 2000 census estimates at 42,647, and using the Quimby Act recommendation of three acres per thousand population, the City currently needs a total of 128 acres of parks, and has 28 acres. At buildout utilizing this recommended standard, with a total population of 93,345, the City will need 280 acres of parkland.

As a guide for implementation of the Plan's park proposals, specific standards are established for distribution, size and service radii for neighborhood, community and mini parks (See Table III-32). The City does not currently (2001) have an established standard, but instead relies on individual development agreements with developers as projects are proposed in the City.

Table III-33
Standards for Recreational Areas

Type of Park Area	Acres/1,000 Population	Ideal Site Size/Min.	Radius of Area Served
Community Parks	5.0	50 ac/20 ac	4.0 miles
Neighborhood Parks	1.0	15+ac/15 ac	0.5 miles
Playgrounds	1.0	15+ac/15 ac	0.5 miles
Playfields	1.0	15 ac/15 ac	1.5 miles
Mini Parks	0.25	1 ac/0.5 ac	0.25 miles

Land Acquisition and Funding Mechanisms

In addition to the Quimby Act, there is legislation to help cities acquire and preserve areas for recreational use. Although funding for the acquisition of additional parkland can be difficult for many cities, there are statewide programs to help facilitate parkland financing. The following discussion provides a summary of these options.

• *Park In Lieu Fees*-stem from the Quimby Act. It includes dedication of land for parks, or where a subdivision is small, a fee in lieu of dedicating land. The limitations to this type of financing are that infill projects such as condos and apartments are exempt and the fee applies primarily to parkland and land improvements in new neighborhoods.

• *Development Impact Fees*-apply only to new development and may only be assessed for new capital costs related to the new development where a defined beneficiary relationship to cost can be established. Within these limitations, Park Facility fees may be established for all land uses under the premise that residents, workers, shoppers and tourists use City Parks.

• *Development Agreements*- are contracts between the City and a developer that outline in detail the responsibilities of each party, resulting in a commitment to the developer of vested rights to subdivide and develop. With development agreements, the developer is assured the right to develop in exchange for negotiated exactions, which can include parks or park fees.

The above funding mechanisms are private development project-specific and stem directly from project development. Other funding sources stem from individual proposed public projects, they include:

• Mello Roos Districts
• Benefit Assessment Districts
• General Obligation Bonds
• Special Tax Revenues & Redevelopment Agency Financing.

TRAILS, BIKEWAYS AND WALKING PATHS

Bikeways, trails and pathways are an important recreational and community resource. A complete network of bikeways and pedestrian pathways within an urban environment helps to reduce the reliance on cars, and contribute to a healthier city. By situating bikeways and pedestrian pathways in central locations, communities can create an entire network of alternative transportation, enabling residents and visitors to walk or bike to any destination. Biking and pedestrian access helps to promote a sense of community by encouraging people to interact and enjoy the amenities within the City.

Class I Bicycle-Way
Option A

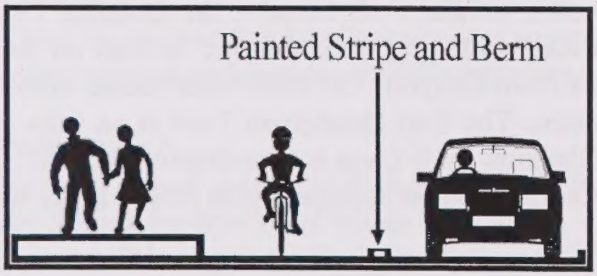
Class I Bicycle-Way
Option B

Hiking trails provide access to areas within a natural setting, and an escape from the noise and stress of the urban environment. Hiking allows people to take pleasure in, and gain appreciation for, an area's natural resources and open space lands. It also provides a rejuvenating and energizing experience that is mentally, emotionally, physically and spiritually rewarding. A local trails system creates a recreational setting that offers many benefits to the community.

Bikeways

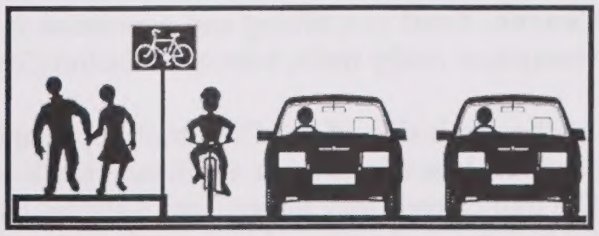
Bicycle facilities are identified in I, II or III classifications. The Class I bikeway is a bicycle path that is completely separated from a roadway or highway, and is often in the form of a combined pedestrian and bicycle pathway.

Class II Bicycle-Way



Class II bikeways are signed and striped bicycle lanes within the paved section of the street. Class II bicycle ways provide a restricted right-of-way, with through travel by motorists or pedestrians prohibited, but with crossflows of pedestrian and motor traffic permitted.

Class III Bicycle-way



Class III bikeways are designated but unmarked bike routes that are located on the street amidst vehicular traffic.

Currently, the only bikeway in the City is the portion of a regional Class I route that is located in the Whitewater River. A modified Class I bike trail is scheduled for construction on the south side of Dinah Shore, from the western to the eastern City limits. A Class II bikeway is scheduled for completion in the fall of 2001 on 30th Avenue, from the western to the eastern City limits. Development of Class I and II bikeways along major streets within the City should be a top priority for meeting the recreational needs of the City. Planning for these facilities will help to create a more livable and healthy community.

Hiking Trails

The Valley is surrounded by a complex regional trail system which occurs primarily in the San Jacinto and Santa Rosa Mountains. Trails beginning on the Valley floor connect to mountain trails which can lead the hiker to Idyllwild, the top of the Palm Springs Aerial Tramway, and beyond. The discussion below includes trails located in and around the City and its planning area.

The **Art Smith Trail** is a 16-mile long trail that extends from Palm Canyon's trails to the Palm Desert' s portion of the Santa Rosa Mountains. This is a strenuous hike with a 1,200-foot

elevation gain. The trail traverses the entire ridgeline of the Santa Rosa Mountains, which exhibits abundant plant and animal life. The Art Smith Trail accommodates hiking, mountain biking and equestrian use.

The **Murray Hill Trail** is located in the eastern portion of Palm Springs, and is accessed behind the 1905 Elks Lodge on Elks Trail. The trail is a strenuous, 10-mile hike that climbs 2,100 feet to the top of Murray Hill. This trail also offers links to other hikes around Murray Hill, including the Clara Burgess and Wildhorse Trails, and access to the Eagle Canyon Oasis. The peak of Murray Hill offers views of Palm Springs, Cathedral City, Palm Canyon and the San Jacinto Mountains.

The **Araby Trail**, also called the "trail to the stars", climbs above the Bob Hope Estate and the home of the late Steve McQueen. The trail is accessed off of Rimcrest/Southridge Road in Palm Springs. It is a moderate, 6-mile hike, with an 800-foot elevation gain. The trail also connects with the Berns/Garstin/Henderson Trails and many other smaller trails found in the foothills. The **Earl Henderson Trail** and **Shannon Trail Loop** are two hiking trails that are located on the ridges and plateaus surrounding Murray Hill, east of Palm Canyon. The trails offer scenic views of south Palm Springs and the San Jacinto Mountains. The Earl Henderson Trail is an easy 4 mile hike, with an elevation gain of 400 feet. The Shannon Trail Loop is a moderate hike that is 7 miles long, and gains 1,000 feet in elevation. Both trails can be accessed from Araby Drive in Palm Springs.

Canyon Trail is a hiking and equestrian 2 mile trail which can be accessed from Garstin, Shannon or Araby trails, west of Cathedral City.

On the north side of the City, trail opportunities are more limited. The **Long Canyon Trail**, however, is accessed from a trailhead north of Long Canyon Road, north of the planning area. The trail extends into Joshua Tree National Park, and although strenuous, can serve as access to the facilities and trails within the park.

FUTURE DIRECTIONS

Currently, parks are few in number, and developed acreage falls far below the recommended standard. One of the City's primary goals for the future should be to establish standards, and identify and develop parklands. Parks and recreational facilities have many important functions in the community. Creating a more diverse system of parks that enhances existing facilities, and plans for and designs new parks for the growing population, will assure the City meets the needs of the community and works to improve the quality of life for its residents .

The City should also focus on creating bikeways and pedestrian pathways along the City's arterial streets. An extensive biking and pedestrian network will provide a much needed recreational facility for the City and for the region. The network should be linked to important locations within the community to decrease the dependence on vehicles and to create a more livable and healthy City.

GOALS, POLICIES AND PROGRAMS

Goal 1

Establish a diversified, high quality public park system that provides recreation opportunities at a variety of scales for all residents.

Goal 2

An accessible, safe park system that provides spaces that encourage public gathering and participation.

Goal 3

A comprehensive bikeway and walking path system which connects homes to work places, commercial venues and recreational facilities, as well as other cities in the Valley.

Policy 1
The City will utilize the Quimby Act to provide at least three (3.0) acres of community and neighborhood parkland per 1,000 population.

Program 1.A
Develop a park master plan that addresses the proposed and anticipated parks and recreational facilities to be developed within the City.
Responsible Agency: Parks and Recreation Division; Parks and Recreation Commission; Planning Commission
Schedule: Immediate

Program 1.B
Investigate the broad range of sources of purchase financing and operating revenue, including Development Impact Fees, Mello Roos special districts, public/private ventures, state and federal grant opportunities, developer fees and inter-agency joint use agreements to supplement revenues collected for parks and recreation projects.
Responsible Agency: Parks and Recreation Division; City Council; Planning Commission
Schedule: Immediate; Continuous

Program 1.B
The City shall pursue a joint-use agreement with the Palm Springs Unified School District to encourage the cooperative use of public school recreational facilities and to allow for efficient land acquisition and development for future joint school-park sites.
Responsible Agency: City Manager's Office; Parks and Recreation Division; Palm Springs Unified School District
Schedule: Immediate

Policy 2
The City will strive to distribute parks and recreation facilities in a manner that is convenient to City neighborhoods and proportionally balanced within population concentrations.

Program 2.A
The location and design of neighborhood parks shall consider neighborhood suggestions and input regarding facility needs, vehicular and pedestrian access, noise and lighting impacts and public safety.
Responsible Agency: Parks and Recreation Division; Parks Commission
Schedule: Ongoing

Program 2.B
City staff shall identify and prioritize park development projects based upon need, land availability, and funding.
Responsible Agency: Parks and Recreation Division; Parks Commission
Schedule: Immediate

Program 2.C
Promote the development of parks in all neighborhoods lacking proximity to park facilities.
Responsible Agency: Parks and Recreation Division; Parks Commission
Schedule: Ongoing

Policy 3
Consult and coordinate with neighboring communities, including the cities of Palm Springs and Rancho Mirage, in developing joint recreational facilities that benefit residents and visitors.

Policy 4
The design of City parks and trails shall accommodate the special needs of the disabled and senior population in Cathedral City.

Program 4.A
Enhanced accessibility shall be included in the planning of park areas and facilities, in accordance with the Americans with Disabilities Act (ADA), and shall include increased wheelchair accessibility and other requirements needed for the elderly and disabled.
Responsible Agency: Parks and Recreation Division; Public Works Department
Schedule: Ongoing

Policy 5
Assess the feasibility and appropriateness of expanding the community center complex and recreational programs to include facilities such as public aquatics, a gymnasium and/or tennis courts and more programs and/or classes.

Program 5.A
Estimate primary costs and evaluate possible financing methods for expansion of the community center complex, and its potential relocation or expansion into the northern portion of the City.
Responsible Agency: Parks and Recreation Division; Planning Commission; Parks Commission; City Council
Schedule: 2002-2003

Program 5.B
Develop and implement plans for the expansion of the community center complex to broaden active recreational opportunities.
Responsible Agency: Parks and Recreation Division; Planning Commission; Parks Commission; City Council
Schedule: 2004-2005

Policy 6
Encourage regional consideration of converting all or portions of Edom Hill County Landfill as a potential regional park site.

Program 6.A
Evaluate the potential conversion of the Edom Hill Landfill to a regional park in cooperation with regional agencies including Riverside County and the Coachella Valley Association of Governments.
Responsible Agency: Parks and Recreation Division, City Manager's Office, Riverside County, CVAG
Schedule: Immediate

Policy 7
Require developers of new residential projects to provide on-site recreational and/or open space facilities to offset the demand for park facilities generated by the projects' residents.

Policy 8
Encourage the development of recreational programs and activities that serve all population segments, including children, the elderly and the disabled.

Program 8.A
Inform citizens of recreational programs and events to encourage participation.
Responsible Agency: Parks and Recreation Division, Parks Commission
Schedule: Ongoing

Policy 9
All City parks and recreational facilities shall provide safe and secure environment for Cathedral City residents and visitors.

Program 9.A
Plans for proposed parks, trails and other recreational facilities shall be thoroughly reviewed and evaluated by City staff to assure adequate lighting, parking lots and visibility.
Responsible Agency: Planning Department; Police Department; Fire Department; Parks and Recreation Division
Schedule: Ongoing

Program 9.B
Provide for strict code enforcement and police patrols to discourage and prevent unlawful activity in City parks.
Responsible Agency: Code Enforcement Department; Police Department
Schedule: Ongoing

Policy 10
The City shall consider alternative methods of providing park and recreational amenities to meet future population demands.

Program 10.A
Support the development of private recreational ventures that will serve the general population.
Responsible Agency: Planning Department; Parks and Recreation Division; Economic Development Department
Schedule: Ongoing

Program 10.B
Develop a program by which the City can accept parkland gifts and dedications that would be beneficial to the community.
Responsible Agency: City Attorney; Planning Department; Foundation for a Livable Community; City Council
Schedule: Ongoing

Program 10.C
Aggressively pursue all funding sources available for parks and trails, including grants, developer contributions, donations and dedications.
Responsible Agency: Parks and Recreation Division; City Manager's Office
Schedule: Immediate; Ongoing

Policy 11
The City shall develop and implement plans for a coordinated and connected bicycle lane network in the community that allows for safe use of bicycles on City streets.

Program 11.A
The City shall inventory all existing major arterial streets for potential Class I and Class II bikeways, and shall program their installation.
Responsible Agency: Planning Department; Engineering Division, Public Works Department; Planning Commission; City Council
Schedule: 2004-2005

Program 11.B
Class I bikeways and sidewalks should be installed on both sides of East Palm Canyon Drive, Date Palm Drive, Ramon Road and other major arterial streets where sufficient right-of-way is available.
Responsible Agency: Engineering Division, Public Works Department
Schedule: 2005-2006

Program 11.C
Class II bikeways should be designated on all existing arterial streets that have sufficient width to safely accommodate bicycle travel lanes.
Responsible Agency: Planning Department; Engineering Division, Public Works Department
Schedule: 2004-2005

Program 11.D
The City should designate Class III bicycles only where Class I and II facilities are infeasible.
Responsible Agency: Planning Department; Public Works Department
Schedule: Continuous

Program 11.E
The City shall continue to work with Coachella Valley Association of Governments, the Agua Caliente Band of Indians and its neighboring cities to create a valley wide bicycle and pedestrian network.
Responsible Agency: Planning Department; CVAG
Schedule: Ongoing

Policy 12
Where feasible, the City shall pursue opportunities to acquire public use privileges that permit access to multi-use trail corridors along the Whitewater and Palm Canyon Washes, or require new development to provide access easements to these facilities.

Program 12.A
Evaluate the practicality of utilizing flood control channels for multi-use trails, where flooding and safety issues can be accommodated, and negotiate inter-agency agreements with the Coachella Valley Water District and Riverside County Flood Control District for this purpose.
Responsible Agency: Planning Department; CVWD; Riverside County Flood Control District, DWA
Schedule: 2002

Policy 13
Participate in and encourage regional trail planning efforts in cooperation with other responsible agencies and cities, with particular emphasis placed on trails in the Santa Rosa Mountains and Indio Hills.
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COMMUNITY IMAGE AND URBAN DESIGN ELEMENT

PURPOSE

The Community Image and Urban Design Element is intended to establish general principles and mechanisms that help define and guide patterns of development in the City of Cathedral City. The goals, policies, and programs identified in this element also help to assure that new development is consistent with the existing built and natural environments. The design of the community and its physical development should reflect the essential values of the residents. For Cathedral City residents, these values include the preservation of valuable natural resources and the desert environment, and the preservation of the City's low density residential character.

BACKGROUND

The Community Image and Urban Design Element is directly related to the Land Use, Circulation, and Open Space Elements. Attitudes toward land use, traffic systems, community safety, and environmental resources shape the physical development of the community and help define its character. With major local, state, and interstate roadways passing through the City, and the associated dependence on automobile travel, sustaining Cathedral City's identity and quality of life depends on maintaining continuity, uniqueness, and a "sense of place." Building and site designs that reflect the natural and historic features of the City and the Coachella Valley provide continuity of design throughout the valley.

Clearly recognized by California law is the need for and the appropriateness of community design standards and development criteria within the community. Most relevant is Government Code Section 65302, which states that "the General Plan shall consist of a statement of development polices and shall include a diagram of diagrams and text setting forth objectives, principles, standards and plan proposals," Government Code section 65302(a) addresses standards that affect population density and building intensity. Also applicable are Government Code Sections 66477 and 66470, which set forth local empowerment for preservation of open space lands.

Other legislation reinforces the adoption of community design standards, including the 1990 California Legislature enactment of Assemble Bill 325, the Water Conservation In Landscaping Act, which recognizes the state's responsibility in mitigating the effects of urbanization on its finite water resources, and the potential savings from water conserving landscape practices. In accordance with the act, the City has adopted a water conservation-oriented landscape ordinance, which meets conservation targets and addresses Community Image and Urban Design Element concerns.

Design that is sensitive both aesthetically and environmentally is essential to preserving and enhancing the diverse economic and neighborhood-based character of Cathedral City. The scale and scope of land use patterns, management of transportation, flood control facilities and community open space and conservation areas must respond and complement the human and natural environment to reflect the City's long-term community character envisioned in the General Plan.

A variety of architectural styles, materials, and colors can be supported to reflect the Southwestern flavor of the City. The integration of the natural desert environment, including rocks, gravel, and native plant materials into the urban fabric will also extend the surrounding landscape into the built environment. Existing and future development that focuses on quality design, materials, and craftsmanship will help assure the construction of a built environment of which the City can be proud.

The creation of a sense of place begins with embracing the unique environment and history of the region. A new Civic Center and street improvements along the East Palm Canyon Drive corridor were completed in 1998; an IMAX theater, in 1999, the interactive Fountain of Life in 2000, and The Mary Pickford Theatre and Experience along with an 1,100-space parking structure were completed in 2001. These are the first of a series of recent Downtown redevelopment projects in the city. Future Downtown projects will include homes, restaurants, shops, plazas and other public gathering places, all of which will help establish an identifiable city center and contribute to a renewed sense of place. Other new developments, including commercial and other non-residential development, can also provide an important basis for "placemaking" in the city.

The Ahwahnee Principles

In pursuing the goal of making Cathedral City a livable and vibrant community, the city has adopted *The Ahwahnee Principles*, as a guideline. These principles address the need for communities and regions to have a vision and strategy for economic development and an enriched sense of community. Visioning, planning and implementation efforts should continually involve all sectors, including the voluntary civic sector and those traditionally uninvolved in the public planning process. These principles are as follows:

1. All planning should be in the form of complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of the residents.
2. Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other.
3. As many activities as possible should be located within easy walking distance of transit stops.
4. A community should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
5. Businesses within the community should provide a range of job types for the community's residents.
6. The location and character of the community should be consistent with a larger transit network.

7. The community should have a center focus that combines commercial, civic, cultural and recreational uses.
8. The community should contain an ample supply of specialized open space in the form of squares, greens and parks whose frequent use is encouraged through placement and design.
9. Public spaces should be designed to encourage the attention and presence of people at all hours of the day and night.
10. Each community or cluster of communities should have a well-defined edge, such as agricultural greenbelts or wildlife corridors, permanently protected from development.
11. Streets, pedestrian paths and bike paths should contribute to a system of fully-connected, interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially defined by buildings, trees and lighting; and by discouraging high speed traffic.
12. Wherever possible, the natural terrain, drainage and vegetation of the community should be preserved with superior examples contained within parks or greenbelts.
13. The community design should help conserve resources and minimize waste.
14. Communities should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping and recycling.
15. The street orientation, the placement of buildings and the use of shading should contribute to the energy efficiency of the community.

The community principles define a community where housing and all the things needed to meet the daily needs of residents are located within walking distance of one another. They call for returning to historic population densities around transit stops to provide the critical mass of people and activities in these areas needed to make transit economically viable. They also call for housing that provides places to live for a variety of people within a single neighborhood, instead of separating people by income level, age or family situation.

Natural Systems and a Basic Strategy

Development and population growth result in substantial environmental effects, which can be best addressed through a thoughtful integration of the natural environmental systems with those of the built environmental. Developing and projecting a holistic picture of the mature City with a sensitivity to site-specific design and development provides the basis for innovative uses of old and new approaches. Flood control channels, for example, are viewed not only as storm drains but also as opportunities for development of wildlife corridors and as improved open space for hikers, equestrians and bicycle enthusiasts.

Foundations of the Community Image and Urban Design Element

The technical and philosophical basis for community design affects the design, development and build-out of the City.

Cohesiveness

The cohesiveness of Cathedral City is achieved by its connections to the natural and historic features of the City and the Coachella Valley, and maintained by the recognition and

continuation of characteristics that have been handed down over time. The city's integration of the Ahwahnee Principles into its design and development, along with attention to creating a pleasing balance between the natural and built environments, are the guidelines by which a sense of community will be enhanced.

Cohesiveness in design can be sustained through an adherence to the essentials of scale and proportion, site and setting, and materials and color. The integration of the natural desert environment into the urban fabric enhances cohesiveness in design of the community. Within these essential principles, a variety of architectural styles can be supported, including adobe, mission style, and modern derivations of each, as well as modern designs ranging from the International Style to Southwest Territorial architecture.

The desert provides an inspiring and pliable palette for design. It also presents clear constraints and opportunities to living in a dry and sunny climate. The use of native and other drought tolerant landscaping also extends the continuity of the desert into the built environment. The use of gravels, rocks, and boulders further promotes the continuity of the built and natural environments.

Character and Identity

Cathedral City's natural setting, its foothills and desert washes are highly recognizable features that define the City's character and identity. A distinctive attribute of Cathedral City is the remarkable mountain views existing from nearly every location in the city. The character of the community and its setting can be preserved and enhanced through the integration of thoughtful grading and revegetation and the use of building and landscape materials indigenous to the area. With spectacular natural and built environs that attract families, vacationing visitors, and second home residents from all walks of life, artists, professionals and others that value Cathedral City's environment, the City has unique and valuable resources upon which to build.

Encouraging the re-integration of native desert landscaping materials will also preserve and enhance the City's uniqueness. A wide variety of native and introduced plants make up the local landscape palette: ocotillo, barrel cactus, encilia, agave, date palms, California fan palms and a wide variety of cactus and succulents are essential symbols of the community and provide endless design opportunities. The emulation of the natural landscape and the protection of open space further the unique and marketable qualities of the community.

Placemaking

An essential component of the City's affirmation of a sense of place is its conscious focus on the unique opportunities that exist in the Downtown. As a newly emerging center for business, government and culture, the Downtown establishes a course for the City as well as being its core for activity. Existing and future design shall continue to emphasize quality planning, design, material and craftsmanship essential to assuring structures and other aspects of the built environment of which the City can be proud. Moreover, quality design standards in most thoughtful development need cost no more, and can cost the community much less than poorly conceived and insensitive design. The near and long-term benefits to the community of well-envisioned design and quality development are significant.

Building from the Downtown, the City can use the Ahwahnee Principles to define other neighborhoods in the City, and create self-sufficient, livable communities within the City. The Community Image and Urban Design Element establishes the policies and programs that can lead to neighborhood or area planning which reflects the unique character of all the City's neighborhoods, whether residential or commercial.

Opportunities for Variation in Neighborhood Character

The beauty and delicacy of the desert and mountains, and those portions of the built environment that we cherish and hope to preserve, are the primary context within which community design judgments are made. The sharp contrast between the natural and built environment is a unique opportunity for community design. The level of assessment and the appropriate perspective will vary with the land use and location being considered. For instance, residential development proposed in highly exposed sites and commercial development plans require distinctly different design review criteria. In every case, new development is required to respect its location and the scale and character of the surrounding built environment.

Harmony and Disharmony
The character of Cathedral City is reflected both in the high degree of harmony between the built and natural environment, and in areas where incoherent development still occurs in the city. A wide range of siting and architectural design opportunities is available and should allow the City to retain character in new development. Adhering to height limits, the use of natural materials, and complementary colors and tones for building surface, and the liberal integration of open space into community design concepts are more in keeping with the central character of Cathedral City.

Nonetheless, flexibility and sensitive design evaluation, and the ability to see the positive qualities of various architectural styles are also essential to a receptive design review process. If quality design is lacking and cannot be secured from the developer or architect, then unsatisfactory development proposals should not be approved. Sensitive design harmonizes with surrounding building, avoids excessive disruption and does not overly compete for attention.

Diverse design approaches should avoid being abrasive and seek an elegant and dynamic integration with the existing and planned built environment. It is equally important to promote an eclectic collection of styles, and not to homogenize the design elements of a neighborhood, leaving it a boring repetition of elevations, roof lines and building materials and colors.

Criteria for Evaluating Building and Site Design

The relationship of new and infill development to other structures and the larger environment should be the focus of building and site design evaluation. Scenic, architectural, landscape architectural resources and the established character of a neighborhood provide a basic frame of reference for proposed development. Planning and design criteria assist in determining a project's compatibility with the surrounding area. These criteria include:

- Site Analysis and Development
- Planning
- Building Height
- Building and Structural Setbacks
- Proportions and Massing
- Pattern and Rhythm of Structures
- Roof types and Materials
- Surface Color and Texture
- Building Projections
- Architectural Details
- Landscape Architectural Treatment

Site Analysis and Development Planning

Site analysis, in all development, provides one of the most important and frequently under-exploited opportunities to understand the limitations and possibilities of the site. Interest regarding development on highly exposed sites with valued scenic resources may conflict with the scenic, open space, and/or community design goals of the community. An adherence to the goals set forth by the Ahwahnee Principles will provide focus and intention to the process. Site analysis and efficient development staging can help limit the amount and cost of grading, can maximize lot and building orientation, and provide a site and structure that optimizes the opportunities and minimizes the constraints of the development site.

Building Proportions, Height and Setbacks

New structures should be similar in height to, and compatible with, other buildings in the vicinity, with the goals of preserving and enhancing design qualities of the built environment and preserving viewsheds. Setbacks should be compatible with those of surrounding structures and scenic resources, providing building presence without allowing the structure or development to dominate other buildings, the streetscape or the natural scenic viewshed.

Proper Massing of Buildings

The proportions of proposed residential, commercial or industrial structures will also affect their compatibility with site and surrounding conditions. Establishing a relationship between existing and planned development may set a standard that is meant to rejuvenate a neighborhood, giving it greater influence in establishing future design criteria for the neighborhood. Generally, height and width of building elevations should not be significantly out of character with existing neighborhood development or natural scenic viewsheds.

Improper Massing of Buildings

Pattern and Rhythm in Community Design
Nature makes, and human communities strive to adopt, natural and instinctively pleasing patterns and rhythms of motifs and massing in community development. How well these elements are handled can range from harmonious to dissident or clashing relationships. The recurrent alteration of peaks and slopes of the hills and the mountains can be emulated and complemented in the design of building roof lines, and in the space and solids of buildings. The development of pattern and rhythm establishes a theme when viewed in the context of surrounding development. At close quarters, pedestrians should be provided with a varied integration of structure and landscaping to soften and tie the structural elements to the natural ones.

Roof Types and Materials
The rhythmic patterns in new buildings and landscape architectural treatments should complement and integrate with the established structures and surrounding natural environment. Roof types and materials can play a critical role in either complementing or degrading the natural scenic viewshed.

Roof types, from flat to multiple arrays of hipped roofs, provide a range of possibilities for contrasting or imitative treatment. Unnecessary building heights are frequently related to roof design, when the roof should be balanced with the building elevation it helps to create. Scale, pattern and rhythm are also applicable to roof design and materials.

Roof Lines

Surface Texture and Color
Prevailing sunny conditions in conjunction with the light color of the surrounding desert make the selection of surface texture and color especially critical to compatibility issues. Surfaces that emulate the coarse, warm tones of the surrounding valley and hills are highly desirable, while slick and shiny finishes produce glaring surfaces that detract from the viewshed and are not pleasing to the eye. However, the emergence of post-modern and other hybrid architectural styles, with their juxtaposition of architectural motifs and the use of contrasting, unusual colors and building materials, are examples of how contrast can be made compatible within broader standards.

Surface texture differs from patterns and rhythm in that texture is provided on a substantially reduced scale. It is seldom as strong a design element as architectural pattern or massing. Although styles change with time, and while the use of strong color may play a dominant part in the design of structures, color is easier to change once development has occurred. The use of texture ranges from smooth adobe-type stucco or plaster to fluted, split-face concrete aggregate block. As with other elements of design, texture must be used carefully so as to complement the overall design while being compatible with surrounding materials.

Building Projections and Architectural Details
Much of a building's design is expressed in the detail and projections that grow out of the building envelope. Building projections and other architectural details play important functional

and aesthetic roles in a building's efficiency as shelter as well as its appearance. Providing privacy and screening form the elements, projections and architectural detail also affect surrounding development. The use of porches and verandas can further enhance residential living space and provide protection from sun and wind. While simple and ornate architectural detail may each represent legitimate design principles, buildings of each style may clash or contrast with surrounding development, and suffer from the comparison. The appropriateness of a particular building design must be viewed within the context of the building's natural setting and man-made environment.

Site Planning and Community Design

Site planning involves the distribution of buildings, parking, driveways and landscaped open space areas of a site. It establishes the development's relationship to the street and surrounding lands. The influences of site design are not always easy to visualize and assess without the development of a detailed site plan. Frequently, the complexity or importance of a proposed development may make it appropriate to require the preparation of perspective renderings of the plan and structures.

Care should be taken not to allow artistic applications of color, landscaping and graphic "eye wash" to obscure or misrepresent the final product as it will actually appear on the development site. Together with building architecture, site planning is a critical design parameter determining the compatibility of proposed development with the existing development in the area and the character of the community.

Gateways, Crossroads, Corridors and Scenic Places

In addition to the architectural character of community design, other elements must be addressed when considering the community as a whole. These include areas with important landmarks and focal points, which lend identity and character to the community. Landmarks or focal points may include natural, historic, architectural, or cultural areas of interest.

Some of the most important community assets are the scenic resources of the Coachella Valley, including the San Jacinto, Santa Rosa, San Bernardino and other mountain ranges surrounding and encompassing the City, and the desert floor. Preservation of these scenic vistas has been an important goal of the community. However, various types of land development, the construction of buildings and walls, landscaping, roads and the extension of utility lines and other facilities have all impacted and threatened to degrade the scenic resources of the community.

The City's natural scenic beauty, as viewed from public thoroughfares and private lands, provides residents and visitors with a direct experience of the breathtaking landforms that define the character of the community. The protection and enhancement of the City's viewsheds is critical to promoting a quality image of Cathedral City. An essential part of this effort is the identification of important areas of significant natural scenic value and setting standards to preserve these resources with continued urban development.

The scenic resources of Cathedral City are most apparent to the traveling public. The natural vistas visible from City streets cannot be properly viewed or appreciated if screened by buildings, walls and landscaping, or the indiscriminate placement of signage. The City, County and State all play active roles in scenic resource preservation.

Cathedral City has a variety of important entry and focus points, which provide opportunities to reinforce the City's identity and scenic viewsheds. The integration of monuments and appropriate signage, as well as special streetscape and landscape treatments, can be used to reflect the community's unique character. Focal points can be located anywhere along major routes, including important street corners, within parks and other public open space, civic buildings, schools and historic areas. Adequate areas for significant landscape or architectural treatment, City entry signage, special paving, and other identifiable treatments all lend character and identity to City entry and other focus points *(also see Scenic Highways discussion in this element).*

Examples of developed landscape architectural elements include the median on East Palm Canyon Drive through the City, which provides a welcoming experience to motorists, bicyclists and pedestrians as they travel through town. The landscaped median also provides a sense of place and vitality to the City. Landscaping elements, monumentation, signage, site furnishings, and open space areas should all be considered in the development standard and policies for landmark or focal point enhancement.

Other corridors that exist in the city are Ramon Road, Date Palm Drive, Cathedral Canyon Drive, and Perez Road. Crossroads, or major intersections, in Cathedral City are at Vista Chino Road/I-10/Date Palm Drive, Ramon Road/Date Palm Drive, Dinah Shore/Date Palm Drive, Date Palm Drive/East Palm Canyon Drive and Gerald Ford/Date Palm Drive. Improvements at these main intersections of the city are currently (2001) in various development and planning stages, and will be monitored by Gateway Plans that will be adopted into the City's amendment codes.

Neighborhood parks are among the city's most valued scenic places, as they provide an enhanced sense of community for its residents as well as a visual sense of calm and well-being; the citizens of Cathedral City have made it clear that residential neighborhoods are among the City's greatest assets. The layout of land parcels within a subdivision can influence the economic impact, traffic safety, and livability of a neighborhood. Placing parks in the center of a neighborhood, for example, serves to provide a community with a meeting point, a place for family activities, and a central neighborhood gathering place.

Signage and Viewsheds of Public Rights-of-Way

The East Palm Canyon Drive commercial corridor, Date Palm Drive and Ramon Road are the most frequently traveled, and are most impacted by signage of businesses attempting to make their existence and location known. Enhancing commercial signage should be conducted in a manner that minimizes the adverse economic impact on business, while restoring the viewshed along existing and planned commercial corridors. Businesses located within Redevelopment project areas may be able to participate in and benefit from RDA sponsored sign renovation programs.

Transportation and Community Design

A broad range of transportation-oriented community design issues must be faced as the community continues to grow. Development design issues and details that must be given careful attention include entry point monument signage, street signage, commercial signage, street lighting levels and fixtures, bus turnouts and shelters, curb and pavement treatments, median island and parkway design and landscaping, roadway reflectors and guardrails, bike lanes and other on-road graphics, and utility structures and facilities. Consistent safety and comfort feasures for pedestrians and bicyclists are central to the city's vision of itself as a livable community.

Developers of new commercial projects should be encouraged to "break up" large expanses of parking with landscaping and pedestrian paths, locating buildings at the street and parking at the sides or rear of the buildings. This design approach also serves to provide the streets with a sense of vitality and community.

Scenic Highways

Especially striking is the mountain vista to the west and south as one descends into Cathedral City from the I-10 overpass. It is an essential and critical component of community design in Cathedral City, while effectively linking the City with other Coachella Valley communities. Many functional community design goals can be achieved through the detailed design and planning for the city's major gateways and corridors. The safe, functionally efficient and aesthetically pleasing design and buildout of these sites is a key element in the City's overall economic health and prosperity.

Neighborhood Design

The City of Cathedral City prides itself on having a wide variety of neighborhood settings and considers its residential neighborhoods to be on of its greatest resources. Attributes that can make a neighborhood unique include adherence to the Ahwahnee Principles' concepts set forth in its preamble:

> "Existing patterns of urban and suburban development seriously impair our quality of life. The symptoms are:
>
> - more congestion and air pollution resulting from our increased dependence on automobiles,
> - the loss of precious open space,
> - the need for costly improvements to roads and public services,
> - the inequitable distribution of economic resources, and
> - the loss of a sense of community.
>
> By drawing upon the best from the past and the present, we can, first, infill existing communities and, second, plan new communities that will more successfully serve the needs of those who live and work within them."

Architecture: Architectural commonality can be established throughout the neighborhood with the coordinated and complementary use of various design components, including building colors, roof design and tile color, window and garage door treatment and architectural building accents and details. These components should be mixed to create a balance of variety, compatibility and conformity or cohesion.

Perimeter Wall/Fence Treatment: Walls and fences define the borders of residential communities and are used in perimeter landscape treatments for a variety of other development types in the City. Designs may consist of wrought iron, stuccoed concrete block, plain and painted slumpstone, split-faced block, plastered, brick-capped or tile accented, and intermittent columns or pilasters. Interspersing solid walls with wrought iron fencing provides views into development open space areas and relieves the closed in feeling that walls can engender.

Wider parkways provide additional wall set backs and landscape treatment that reduces the enclosed feeling. Wall breaks and fenestration along public rights-of-way help to integrate private community open space and viewsheds with those of the traveling public. The City should encourage the continued use of this type of viewshed window as a means of reducing the tunnel effect and preserving scenic vistas.

Parkway Landscaping: One of the most prominent and visible exterior features of neighborhoods and private communities is parkway landscaping. Design can range from the formal to the "natural" or combinations of both approaches. Formal design may include ordered rows of date palms or other distinctive tree, regularly interspersed with equally ordered shrubs and beds for annuals plantings. More informal designs seek to imitate nature by interspersing native and non-native desert plantings in a free-form or random pattern. Groupings of major elements, and the use of lawn areas may also be integrated into both more and less formal designs.

Community Design in Public Facilities

Community Design encompasses the entire city and includes public buildings, utilities, and street traffic control and safety devises that have the potential to detract from the appearance of the community. The City must consistently make quality appearance one of its prime priorities. Current efforts include the development of unique and distinctive desert landscape treatments on major roadways. Desert colors and tones can also be integrated into street signs, traffic signals and lighting standards to soften their impact on the surrounding viewshed.

Bus shelter design should also be a high priority, making these facilities functionally superior and aesthetically pleasing. These structures can utilize architectural styles that complement the streetscape treatment and elevate the appearance of these utilitarian structures. Utility cabinets located along the street, including traffic signal and telephone switching facilities, are frequently painfully obvious. To the greatest extent possible, these features should be installed in underground vaults, or effectively screened from public view. Overhead utility lines also present visual obstructions to the natural setting and may pose safety hazards that should be minimized by a program of utility undergrounding.

FUTURE DIRECTIONS

Community design considerations, including preservation and enhancement of scenic highways, can subtly and profoundly shape the image of the community. Establishing basic criteria to promote good and conscientious design that enhances community cohesiveness will allow Cathedral City to emerge as a thriving community. Community design considerations are directly related to issues associated with land use, traffic, arts and culture, health and safety, economic development and environmental systems.

The Community Image and Urban Design Element can be implemented by several mechanisms, which include the thoughtful application of the other Elements of the General Plan, the City Zoning Ordinance, and through Redevelopment Plans and Neighborhood Plans for individual project areas. The most effective instrument will be the Zoning Ordinance, which set forth specific standards and establishes design parameters and guidelines for site planning and building design.

GOALS, POLICIES AND PROGRAMS

Goal 1

Citywide design and development that promote and support a well-integrated residential community, provide a heightened sense of livable community, and present opportunity for public gathering.

Goal 2

Community design, architecture, and landscaping that enhance and are compatible with the City's desert setting and natural scenic resources.

Policy 1
Public and private sector development shall be subject to citywide design guidelines that include the Ahwahnee Principles and are intended to protect the community's scenic viewsheds, provide community cohesion, and enhance the image of Cathedral City as a residential community.

Program 1.A
The Zoning Ordinance and other regulatory documents that define the design parameters that apply to public and private development shall be amended and maintained as necessary.
Responsible Agency: Planning Department
Schedule: On-going

Program 1.B
The City shall maintain comprehensive application packages which provide detailed information on requirements, standards and guidelines .
Responsible Agency: Planning Department
Schedule: On-going

Program 1.C
The City shall thoroughly review all development proposals to assure compliance with community design standards.
Responsible Agency: Planning Department; Planning Commission; City Council
Schedule: On-going

Policy 2
The City shall support the positive, unique characteristics of existing residential neighborhoods and require that new neighborhoods be designed to provide distinctive, identifiable design elements.

Program 2A
Develop and implement Neighborhood Plans guided by the Ahwahnee Principles that define and support positive unique qualities of existing and planned neighborhoods.
Responsible Agency: Planning Department; Parks and Recreation Department; Planning Commission; City Council
Schedule: On-going

Program 2.B
New residential development proposals shall be reviewed by City staff to assure compliance with applicable Neighborhood Plans and to evaluate proposed design features, such as entry statements, recreational facilities, neighborhood parks and schools, and landscaping along public rights-of-way.
Responsible Agency: Planning Department; Planning Commission; City Council
Schedule: On-going

Program 2.C
The City shall develop a program to install entry monumentation features at entrances to existing neighborhoods, and shall require developers to install them at new neighborhood sites.
Responsible Agency: Planning Department; Public Works Department
Schedule: On-going

Policy 3
The City shall have a distinct, identifiable center that combines civic, cultural and recreational uses.

Program 3.A
The City shall implement the Downtown Precise Plan and shall review development proposals within the downtown for compliance with Precise Plan design parameters.
Responsible Agency: Planning Department Redevelopment Agency; Arts Commission, Planning Commission; City Council
Schedule: On-going

Policy 4
Support the development of distinct, identifiable street corridors.

Program 4.A
Include Street Corridor Plans that define appropriate themes and street design features, including street trees, furnishings, and other fixtures in Neighborhood Plans.
Responsible Agency: Planning Department; Public Works Department
Schedule: On-going

Program 4.B
Include street corridor improvements in the Capital Improvement Program.
Responsible Agency: Public Works Department; Economic Development Department
Schedule: On-going

Policy 5
Areas of special interest, including entry points, landmarks, and scenic highway viewsheds, shall receive appropriate treatment whether part of public or private development proposals.

Program 5.A
Require the submittal of detailed landscape, architectural, and special signage designs for project entries and other social features to assure compliance with community design parameters and compatibility with the natural and built environments.
Responsible Agency: Planning Department;
Schedule: On-going

Policy 6
Native desert landscape materials and site-sensitive architectural designs shall be incorporated into all public and private building projects to enhance the cohesion between the natural and built environments.

Policy 7
Commercial development projects shall contribute to the design objectives of the community and the specific district or corridor in which they are located.

Program 7.A
The City shall review all commercial development to assure pedestrian-oriented circulation, safe and convenient ingress and egress, screening of outdoor storage/loading and other unsightly areas, lighting, signage, and the planting of mature landscaping to provide an immediate effect of permanency.
Responsible Agency: Planning Department
Schedule: On-going

Policy 8
Community and Neighborhood Activity Centers, which concentrate land uses at high intensities, shall be established at appropriate locations to encourage public social interaction and a sense of public space.

Program 8.A
Actively pursue a joint use agreement with the Palm Springs Unified School District to promote public school grounds as integral parts of neighborhood activity.
Responsible Agency: Parks and Recreation Department; Planning Department; School District
Schedule: On-going

Policy 9
Neighborhoods shall establish a well-defined edge or boundary, consisting of landscaping, green belts, open space, and/or entry monumentation, in appropriate locations to help create a unique community image and sense of place.

Program 9.A
The City shall require the incorporation of parks and open space into new development projects, and shall ensure that new parks and open space are developed in the early phases of development projects.
Responsible Agency: Planning Department; Planning Commission; City Council
Schedule: On-going

Policy 10
The City shall actively pursue joint land use agreements with the Agua Caliente Band of Cahuilla Indians and individual landowners in an effort to eliminate billboards within the City limits.

Policy 11
The City shall maintain and enforce a Sign Ordinance and the Auto Center Sign Ordinance, which define permitted sign locations, sizes, maintenance, and other related requirements.

Policy 12
In an effort to preserve the value of the community's night sky, outdoor lighting shall be shielded downward and limited to the minimum height, number, and intensity of fixtures needed to provide sufficient security and identification on residential, commercial, and other development.

Policy 13
Incorporate the City's identification symbol into street signage, planters, benches, public buildings, City vehicles, streetscape furnishings, and other appropriate applications.

Policy 14
The City shall support a high level of Code Enforcement to encourage neighborhood beautification and to maintain property values and quality of life.

Program 14.A
The City shall develop and adopt a program of Code compliance standards for existing neighborhoods, and enforce the program through regular Code Enforcement inspections.
Responsible Agency: Code Enforcement Department, City Council
Schedule: 2003-2004; Continuous

Policy 15
Overhead utility lines shall be undergrounded to the greatest extent practical through the establishment of an undergrounding program and guidelines.

ECONOMIC & FISCAL ELEMENT

PURPOSE

The purpose of the Economic and Fiscal Element is to provide a multi-dimensional picture of the City's economy through a broad range of data and information. The element explores the health of the local economy and the relationship between City government and its responsibilities, such as establishing and enforcing land use policies and regulating new development. The element is also intended to examine the City's potential economic opportunities and constraints, and set forth a series of goals, policies, and programs that will help create a viable, well-balanced economy.

BACKGROUND

The overall health of the City's economy is a product of the complex interrelationships between the City's and region's physical and economic environments. In this regard, the Economic and Fiscal Element is related, to some degree, to all other General Plan elements. The issues addressed in other General Plan elements are largely centered around the protection of human life and property from environmental hazards, the provision of adequate public services and facilities, and the enhancement of natural and cultural resources, all of which directly impact the City's ability to retain and attract businesses and residents, who support the local economy. The Economic and Fiscal Element has the strongest relationship with the Land Use Element, which determines the distribution of land uses by type, location, intensity, and extent of use, and therefore impacts the City's long-term economic prosperity.

The Economic and Fiscal Element is based upon California Government Code Section 65030.2, which states: "land use decisions shall be made with full knowledge of their economic and fiscal implications, giving consideration to short-term costs and benefits, and their relationship to long-term environmental impacts as well as long-term costs and benefits." The Element also examines issues set forth in Government Code Sections 65863.6 and 66412.3, which require cities and counties to balance the available fiscal and environmental resources against the housing and public services needs of the community.

Economic Conditions in Cathedral City

In formulating appropriate fiscal and economic development goals, policies, and programs, it is essential to understand the City's role in the Coachella Valley economy. Over the past two decades, the Coachella Valley has emerged to become one of the premier destination resort areas in the country, attracting visitors, seasonal residents, and retirees, who bring revenue to the valley and generate a spin-off demand for jobs and visitor-related services.

In recent years, communities in the eastern Coachella Valley, particularly Palm Desert and La Quinta, have positioned themselves to absorb much of the revenue generated by the regional tourist industry, by attracting nationally recognized resort and convention centers, first-class golf

course and recreational facilities, highly valued country club and estate residential developments, and a wide range of visitor-serving retail and restaurant establishments.

Cathedral City's position in the regional tourist industry has been more modest, and the City is better known for its ability to provide a wide range of affordable housing products, including mobile homes, apartments, single-family detached units in standard subdivisions, and custom homes. The City has successfully marketed itself to permanent residents, particularly younger families. City-based retail development has traditionally been limited to neighborhood and community-scale commercial centers, which principally serve year-round families living in the City and other communities in the western valley.

Over the past five years, however, the City has made a substantial commitment to promoting local economic growth through aggressive action and innovative planning. The City's most comprehensive economic development effort has been the Downtown Redevelopment project, which was initially proposed by the City in 1992. The downtown area is generally bounded by Date Palm Drive on the east, C Street on the south, Cathedral Canyon Drive on the west, and the Whitewater River Stormwater Channel on the north. The project was conceived and developed as a pedestrian-oriented festival marketplace, containing a combination of shopping, dining, and entertainment venues, including the IMAX and Mary Pickford theaters, which are intended to attract shoppers and moviegoers throughout the Coachella Valley. It is anchored by the Civic Center building, which serves as an important municipal monument and provides a central gathering place for community functions. The Downtown Redevelopment project involved significant roadway improvements to the East Palm Canyon Drive corridor, the construction of a municipal parking structure, and other public improvements aimed at upgrading the image of the downtown district. The revitalization effort was intended to stimulate private investment in this portion of the City and strengthen the City's economic position in the regional economy.

City Cost/Revenue Trends

Table III-34, below, provides a historical presentation of the City's major General Fund revenue sources for Fiscal Years 1996/97 through 2000/01. The data indicate that total revenues have increased by approximately 32% over the five-year period. There has been steady growth in several categories, particularly the sales tax, transient occupancy tax, and Planning Department revenues. Interest revenue has fluctuated with changes in interest rates over time. Property tax revenues have been more sensitive to the rise and fall of the real estate market, and have remained relatively steady over the past five years.

Table III-34
City of Cathedral City General Fund Revenues
FY 1996-97 through FY 2000/01

Revenue Source	1996/97 Actual($)	1997/98 Actual($)	1998/99 Actual($)	1999/00 Adopted($)	2000/01 Adopted($)
Property Tax	356,647	360,385	349,490	360,000	360,000
Sales & Use Tax	4,307,742	4,873,192	5,990,220	5,200,000	7,000,000
Transient Occupancy Tax	853,249	857,276	1,120,397	860,000	1,300,000
Structural Fire Tax	435,699	440,470	435,314	440,000	448,000
Franchise Fees	750,847	828,341	829,852	825,000	860,000
Interest Revenue	634,675	649,691	744,507	300,000	700,000
Planning[1]	1,069,331	995,120	1,624,782	1,454,231	1,886,878
Other Revenue[2]	5,656,831	5,717,411	6,525,519	5,790,688	6,104,937
Total	**14,065,021**	**14,721,886**	**17,620,081**	**15,229,919**	**18,659,815**

[1] Includes revenues derived from the Planning Department, such as planning, engineering, and construction permit and plan check fees, map sales, operating reimbursements, and labor reimbursements.
[2] Includes a wide range of miscellaneous General Fund revenues, such as fines and forfeits, fire permits/inspections and fees, paramedic service fees, business permit fees, and transfers and reimbursements from other funds.
Source: City of Cathedral City Adopted Operating Budget, Fiscal Year 2000-01.

In addition to the General Fund revenues described in the table above, the City's Redevelopment Agency is expected to receive approximately $12,712,127 in tax increment revenue in Fiscal Year 2000/01. This represents an increase of $584,043 over the previous year. This revenue source has been instrumental in implementing the Downtown Redevelopment project and reducing the need to use General Fund revenues for funding capital improvements along East Palm Canyon Drive and in other redevelopment project areas.

Expenditure Trends

Table III-35, below, summarizes City expenditures since Fiscal Year 1996/97, and indicates that expenditures have increased by approximately 45% over the past five years. The City's highest expenditure category has consistently been the Police Department, closely followed by the Fire Department and General Government services. In addition to the General Fund expenditures listed below, the City's Redevelopment Agency will allocate approximately $12,648,171 during Fiscal Year 2000/01 in the form of debt service, pass-through funds to other agencies, set-aside funds for low and moderate income housing, and discretionary purposes.

Table III-35
City of Cathedral City General Fund Expenditures
FY 1996/97 through FY 2000/01

Expenditure Category	1996/97 Actual($)	1997/98 Actual($)	1998/99 Actual($)	1999/00 Adopted($)	2000/01 Adopted($)
General Government[1]	4,024,621	3,715,688	3,969,536	3,679,103	4,280,996
Police Department[2]	5,533,444	5,508,103	5,713,798	5,938,507	8,184,009
Fire Department[3]	3,492,544	3,440,801	3,668,503	3,944,183	4,566,175
Community Organizations	145,000	171,000	161,482	145,310	170,310
Planning[4]	869,412	1,005,230	1,413,883	1,555,484	3,184,127
Total	**14,065,021**	**13,840,822**	**14,927,202**	**15,262,587**	**20,385,617**

[1] Includes City Council, City Clerk, City Management, Personnel, Legal Services, Risk Management, Finance, and General Government Expense, and Public Information Officer, as shown on page 132 of Adopted Operating Budget.
[2] Includes Police Administration, Field Services, Investigation Services, Community Services, Emergency Communications, Gang Related Activity Suppression Program, Animal Control, and Information Management.
[3] Includes Fire Administration, Fire Suppression, Fire Prevention, Paramedic Services, Disaster Preparedness, and Code Enforcement.
[4] Includes Planning Administration, Planning Division, Building Inspection Division, Engineering Division, Public Works, and Parks and Recreation.
Source: City of Cathedral City Adopted Operating Budget, Fiscal Year 2000-01.

Demographic Characteristics

In order to understand the needs of the City in the future, it is important to understand the makeup of its citizenry, and the changes that have occurred in that makeup in the last several years. The following section provides statistical data regarding the residents of Cathedral City. Where available, 2000 Census data has been utilized, but it is important to note that only very limited information has been released by the Census Bureau at the time of this writing (2001).

Population

Like other Coachella Valley communities, the City of Cathedral City has experienced tremendous growth over the past two decades. During the 1980s, the City's population nearly tripled, increasing from approximately 11,100 in 1980, to 30,085 in 1990. According to the U.S. Census, the population reached 42,647 by 2000, representing an increase of 42% since 1990.

Age Distribution

Although the Coachella Valley is a popular destination for seniors and retirees, Cathedral City has traditionally attracted young adults and families, partly because of its wide range of affordable housing products. According to the 1990 Census, the median age of Cathedral City residents was 31.4 years. By 2000, it had increased slightly to 32.0 years. The median age for Cathedral City residents is comparable to that of Riverside County residents (33.1 years), but is substantially younger than that of neighboring communities.

The median age in Cathedral City is about 15 years younger than in Palm Springs (46.9 years) and about 29 years younger than in Rancho Mirage (61.3 years). The table below illustrates the City's age distribution for year 2000, and indicates that younger and middle-aged adults, ages 25 to 54 years, comprise the largest segment (40.7%) of the City population.

Table III-36
Age Distribution, 2000

Age Range	# Residents	% of Pop.
Under 5 years	3,763	8.8%
5-9 years	3,974	9.3%
10-14 years	3,587	8.4%
15-19 years	3,059	7.2%
20-24 years	2,651	6.2%
25-34 years	6,386	15.0%
35-44 years	6,660	15.6%
45-54 years	4,318	10.1%
55-59 years	1,590	3.7%
60-64 years	1,456	3.4%
65-74 years	2,868	6.7%
75-84 years	1,848	4.3%
85+ years	487	1.1%

Source: U.S. Census, 2000.

Ethnicity

Since 1990, the City has experienced a shift in its ethnic composition, with a larger percentage of residents identifying themselves as Hispanic or Latino. According to the 1990 Census, 37.2% of City residents were characterized as Hispanic, but by 2000, this number had grown to 50.0%. The ethnic characteristics of City residents, as described by the 2000 U.S. Census, are shown in the table below.

Table III-37
Ethnicity, 2000

Race	No. of Persons	% of Population
One Race		
White	27,845	65.3%
Black	1,169	2.7%
American Indian/Alaska Native	440	1.0%
Asian	1,575	3.7%
Native Hawaiian/Pacific Islander	32	0.1%
Other Race	9,834	23.1%
Two or More Races	1,752	4.1%
Total	**42,647**	**100%**
Hispanic or Latino (of any race)	21,312	50.0%

Source: U.S. Census, 2000.

Household Size

A "household" includes all of the people who occupy a housing unit. It does not include those living in group quarters; however, their impact on the City's household characteristics is very limited and accounted for only 0.2% of the City's population in 1990 and 0.3% in 2000. Household size represents the average number of people living in a dwelling unit. In 1990, there were a total of 10,805 households in Cathedral City, with an average household size of 2.75 persons per household. By 2000, the number of households had increased by about 30% to 14,027, with an average size of 3.03 persons per household. The City's average household size is comparable to that of the Riverside County average (2.98 persons per household), but is substantially larger than that of neighboring Palm Springs (2.05) and Rancho Mirage (1.92).

Median Household Income

The median household income in Cathedral City was $30,908 in 1990, which was slightly higher than the median household income ($29,900) of the Coachella Valley as a whole. As illustrated in the table below, City residents are likely to have middle-class incomes, with 35% of households earning between $25,000 and $49,000 annually.

Table III-38
Household Income Distribution, 1990

Income Range	No. of Households	% of Households
Less than $5,000	552	5.1%
$5,000-9,999	1,044	9.6%
$10,000-14,999	968	9.0%
$15,000-24,999	1,653	15.2%
$25,000-34,999	1,886	17.5%
$35,000-49,999	1,928	17.8%
$50,000-74,999	1,850	17.1%
$75,000-99,999	559	5.2%
$100,000-149,999	265	2.5%
$150,000+	100	1.0%
Total	**10,805**	**100%**

Source: 1990 Census, as provided in Table III-6, "Profile of Development Prospects for the Cathedral City General Plan," Economic Research Associates, revised February 15, 1996.

Updated household income data from the 2000 Census was not available at the time of this writing. However, other data sources indicate a substantial increase in the City's median household income. The Inland Empire Economic Databank and Forecasting Center estimated that, in 1998, the City's median household income was $44,158. The Inland Empire Quarterly Economic Report estimated that the median income was approximately $42,710 in 1999.

Employment Characteristics

According to a recent (2000) regional economic study conducted by the Coachella Valley Economic Partnership, there were approximately 74,146 jobs in the Coachella Valley in 1991. By 1999, the number had increased by 35.2% to 100,231, a growth rate that outpaced that of the Inland Empire to the west. Given the Coachella Valley's popularity as a resort destination, regional employment opportunities are heavily oriented toward retail, hotel/recreational, and service-related industries. Agriculture, construction, and health services also represent strong sectors of the regional economy.

Employment characteristics in Cathedral City are generally consistent with regional trends. In 1990, approximately 62% of City residents 16 years and older were employed in the labor force. As shown in the following table, most worked in the retail trade (23%) or construction (14%) industries. The largest employers of Cathedral City residents are listed in Table III-40.

Table III-41
Jobs vs. Residents in the Coachella Valley, 2000

City	% of Regional Jobs	% of Regional Residents
Cathedral City	5.4%	15.3%
Coachella	8.7%	7.3%
Desert Hot Springs	3.7%	10.2%
Indian Wells	1.2%	5.5%
Indio	17.8%	21.0%
La Quinta	5.8%	6.5%
Palm Desert	24.8%	11.3%
Palm Springs	16.1%	12.3%
Rancho Mirage	8.7%	3.7%
Unincorporated/Other	7.8%	6.9%
Total	**100%**	**100%**

Source: Exhibit 42, "Coachella Valley Economic Review," prepared for the Coachella Valley Economic Partnership by Economics & Politics, Inc. and The Resource Group, July 22, 2000.

Housing Market

Among Cathedral City's economic strengths is its ability to provide a variety of affordable residential products, ranging from apartments to newer master planned residential developments, at competitive prices that are typically lower than those found in other Coachella Valley communities. According to the California Association of Realtors, during the fourth quarter of 1998, the median sales price for new and existing homes in Cathedral City was $96,000. More recent data indicates that home values are increasing throughout the Coachella Valley, but Cathedral City continues to offer some of the most competitive prices. The Inland Empire Quarterly Economic Report shows that, during the first quarter of 2000, median housing prices in Cathedral City were $117,750 for existing homes, and $165,700 for new homes.

The City's housing stock increased from 15,229 units in 1990 to 17,916 units in 2000, which represents a ten-year increase of about 17%. As shown in the following table, the majority of new structures are single-family, detached dwellings, which is typical of a low-density, suburban community. Much of this new development has occurred in the northern portion of the City, between 30th Avenue and Interstate-10. The percentage of attached single-family units and mobile homes in the City's housing mix has decreased since 1990, while the percentage of multi-family units has remained relatively unchanged.

Table III-42
Housing Characteristics in Cathedral City, 1990 vs. 2000

	1990		2000	
Housing Type	**No. Units**	**% of Total**	**No. Units**	**% of Total**
Single-Family, Detached	6,525	42.9%	8,745	48.8%
Single-Family, Attached	1,999	13.1%	2,034	11.4%
Multi-Family, 2-4 units	1,966	12.9%	2,295	12.8%
Multi-Family, 5+ units	1,656	10.9%	1,976	11.0%
Mobile Homes	3,083	20.2%	2,866	16.0%
Total	**15,229**	**100.0%**	**17,916**	**100.0%**

Source: California Department of Finance.

Due to the Coachella Valley's popularity as a resort destination, and its ability to attract a substantial part-year, non-resident population, the regional demand for second home ownership is strong. It is estimated that approximately 27% of all housing units in the Valley are used for non-resident purposes (Economic Research Associates, 1996), and growth in second home ownership is expected to remain strong during the next decade. Traditionally, these units have been constructed in the cities of Palm Desert, Rancho Mirage, and Palm Springs. The 2000 U.S. Census identifies the number of "vacant" housing units, which are used for seasonal, recreational, or occasional use. These units account for 23.5% (7,240 units) of all housing units in Palm Springs, 26.1% (3,079 units) in Rancho Mirage, and 19.0% (485 units) in Palm Desert.

Second home ownership has been more modest in Cathedral City, however, where only 10.5% (1,874 units) of housing units are vacant for seasonal or recreational purposes (2000 U.S. Census). A study of development prospects for Cathedral City estimated that, if recent trends in second home ownership continue, the City could attract a significant share of new non-resident housing products over the next decade, possibly adding as many as 1,400 new units to the City's housing mix (Economic Research Associates, 1996). The Downtown Redevelopment area, which is centrally located and can accommodate higher-density housing opportunities, could be instrumental in attracting vacation homebuyers and retirees to Cathedral City. The Downtown Precise Plan includes lands between Cathedral Canyon Drive and Date Palm Drive which are planned for a variety of housing types, including affordable housing, senior and congregate care units, and condominium or townhome units.

The City could realize substantial spin-off revenues, particularly increased sales and use tax revenues and increased demand for retail and service-related jobs, generated by a larger non-resident population. The City should consider directing future marketing efforts at this growing and potentially lucrative market, and determine whether and where second-home ownership fits into the community's long-range goals.

Commercial Development

Commercial development is a critical component of most communities, as the sale of goods and services can generate significant sales tax revenue and employment opportunities. Over the past decade, the City of Palm Desert has established itself as the retail powerhouse of the Coachella Valley, with the City of La Quinta emerging as a strong competitor. Their dominance in the regional retail market is partly due to their central location within the Coachella Valley, relatively high resident income levels, and the ability to offer a wide range of retail facilities, including exclusive specialty shops, large department stores, chain restaurants, and large-volume home improvement warehouses.

Commercial development in Cathedral City has been traditionally comprised of smaller-scale neighborhood and community shopping centers, which serve City residents but are not able to attract a larger consumer base. An exception is the automobile dealer industry in the Cathedral City Auto Center on East Palm Canyon Drive, which, given its specialty, is able to attract consumers from throughout the Coachella Valley and other desert communities. Other major retailers are also auto-related and include auto parts stores and repair shops.

Revitalization of the City's downtown core has afforded the City with tremendous opportunities to further define and expand its role in the regional retail market. Consistent with the downtown district's marketed image as a festival marketplace, existing commercial development includes an IMAX theater, the Mary Pickford Theater (multiplex cinema), and small-scale restaurants and retail shops. However, the Downtown district has not yet reached its full retail potential, and additional development opportunities exist.

Taxable Sales and Sales Tax Revenues

The table below describes taxable sales trends in the City from 1995 through 1999, as recorded by the California Board of Equalization. The data indicate that the City's taxable sales increased steadily by nearly 53% during this five-year period. This is a substantial increase due, in part, to tremendous sales tax revenue gains generated by automobile-related sales, which increased nearly 73%. Other growing markets included home furnishings/appliances, for which taxable sales more than doubled from 1995 to 1999, and eating/drinking establishments, for which sales tax revenues increased by about 29%. In 1995, there were approximately 1,070 taxable sales generators/outlets in the City, but by 1999, the number had decreased to 993. It is interesting to note that, during this five-year period, the increase in total taxable sales occurred despite a loss of 77 taxable sales generators/outlets in the City.

The latest taxable sales data, provided by the City, indicate that taxable sales during year 2000 were $684,864,500. This represents an increase of about $75,035,500 over 1999 taxable sales, or a one-year increase of about 12.3%.

Table III-43
Taxable Sales in Cathedral City, 1995-1999

Type of Business	Taxable Transactions ($000) 1995	1996	1997	1998	1999
Retail Stores					
Apparel	4,480	4,538	4,701	4,841	6,118
General Merchandise	72,673	74,438	74,731	77,178	86,212
Food Stores	24,423	26,087	25,584	24,800	26,249
Eating/Drinking Places	30,271	28,718	31,500	34,565	38,935
Home Furnishings/Appliances	16,888	16,767	18,670	27,235	34,021
Bldg. Materials/Farm Implements	13,234	14,218	13,822	18,264	21,938
Auto Dealers/Supplies	132,018	131,476	147,121	180,423	227,984
Service Stations	33,432	31,967	31,357	27,573	33,452
Other Retail Stores	21,932	21,482	16,876	17,344	21,051
All Other Outlets	49,627	58,158	74,054	94,944	113,869
Total All Outlets	**398,978**	**407,849**	**438,416**	**507,167**	**609,829**

Source: "Taxable Sales in California (Sales & Use Tax)," During 1995-1999, California State Board of Equalization.

The following table describes the spending potential of Cathedral City residents and is intended to help identify which retail market niches would best serve the City population. The analysis takes into account such factors as City population, number of households, median income, annual population growth, and annual household growth. The data indicate that the largest existing expenditure categories are groceries/drugs, food and alcohol away from home, and apparel and footwear. The table also provides 5-year expenditure projections.

Table III-44
2001 Annual Expenditure Potential
for Cathedral City Residents

Expenditure Category	Current Year Expenditure Total ($000s)	5-Year Expenditure Total ($000s)	Current Year Expenditure Per Household ($000s)	Annual Growth Rate
Apparel/Footwear	$46,715	$56,144	$2,898	4.0%
Personal Care	$17,623	$23,069	$1,093	6.2%
Grocery/Drug	$96,857	$120,590	$6,009	4.9%
Alcohol for Home Consumption	$11,241	$13,727	$697	4.4%
Food/Alcohol Away From Home	$54,020	$67,020	$3,351	4.8%
Tobacco	$9,721	$12,505	$603	5.7%
Hardware/Home Improvement	$11,778	$14,157	$731	4.0%
Home Furnishings	$21,190	$26,108	$1,315	4.6%
Home Services	$5,489	$6,677	$341	4.3%
Household/Garden Supply	$5,831	$7,561	$362	5.9%
Auto Repair/Service	$26,196	$30,756	$1,625	3.5%
Gasoline	$22,068	$24,057	$1,369	1.8%
Home Electronics/Appliances	$23,552	$32,127	$1,461	7.3%
Toys/Sporting Goods	$12,223	$16,202	$758	6.5%
Entertainment	$21,953	$28,414	$1,362	5.9%
Other Categories	$344,032	$435,554	$21,343	5.3%
2001 Total	**$730,489**	**$914,700**	**$45,318**	

Source: prepared for Terra Nova Planning & Research, Inc. by Claritas, Inc.

The table above indicates that, for 2001, the total sales potential of City residents was estimated at $730,489,000. However, according to the City, actual taxable sales in Cathedral City in 2000 were $684,864,500. The difference of $45,624,500 represents the approximate retail sales potential of City residents that is not being spent within the city limits, and suggests that there is significant retail leakage to other communities. This represents a loss of revenue for local businesses as well as the City General Fund.

The City is losing approximately 6.2% of its retail spending capacity to other communities. This is attributable to several factors. First, as described earlier, there is a relative imbalance between the number of jobs and residents in Cathedral City, which forces much of the City's labor force to work outside the City and provides them with opportunities to shop elsewhere while commuting to work. The City also has a basic range of retail outlets that have difficulty competing with larger chain stores and specialty shops elsewhere in the valley.

Wal-Mart and Target are exceptions to this pattern. In the same regard, historically, Cathedral City has had an excess of strip commercial development spread out along arterial roads, rather than a comprehensive shopping mall or consolidated shopping district that centralizes retail synergies within the City. The revitalized Downtown Redevelopment Area is expected to fill this void over the long-term, but is still in the process of defining itself as a regional retail center. Nonetheless, it is anticipated that the investments made in the Downtown district will enhance the City's ability to attract businesses that offer unique, yet essential products and services to the local and regional population.

Tourism and Traveler Revenues

The Coachella Valley has long been recognized as a leading resort destination, which is best known for its unique desert environment and climate. A major portion of regional hotel facilities was constructed during the 1980s, and despite the national recession of the early 1990s, the tourism industry has remained the stronghold of the regional economy. Although many Coachella Valley cities have embraced tourism as the foundation of their local economies, the industry has generally played a more limited role in Cathedral City. The following table provides an inventory of regional hotel/motel facilities and associated revenues.

Table III-45
Hotel/Motel Inventory for the Coachella Valley, 1999

City	No. of Hotels	No. of Rooms	TOT Rate	TOT Collections	Gross Hotel Room Sales
Cathedral City	7	529	10%	$1,139,882	$11,398,820
Desert Hot Springs	41	873	10%	$721,661	$7,216,613
Indian Wells	4	1,273	9.25%	$4,330,471	$46,815,903
Indio	23	1,407	10%	$880,246	$8,802,462
La Quinta	3	652	10% or 11%	$3,685,326	$33,843,166
Palm Desert	14	1,896	9%	$7,602,348	$84,470,536
Palm Springs	132	6,366	10% or 10.8%	$11,225,402	$107,415,950
Rancho Mirage	4	1,306	10%	$5,079,551	$50,795,509
Unincorporated Riv.Co.	6	295	10%	N/A	N/A
Total	**227***	**14,597***	**---**	**$34,664,888**	**$350,758,958**

* Excludes condominiums, timeshares, and rental properties other than hotels/motels. Source: Palm Springs Desert Resorts Convention and Visitors Bureau.

As described above, there are 227 hotel/motel properties (with 14,597 rooms) in the Coachella Valley, and only seven (529 rooms) are located in Cathedral City. During 1999, the City's gross hotel room sales totaled approximately $11.4 million, which represents only about 3.2% of all room sales in the Coachella Valley.

Despite Cathedral City's limited representation in the regional hotel/motel market, hotel operations provide the City with one of its largest revenue sources, transient occupancy taxes. The transient occupancy tax (TOT) is imposed on individuals for the privilege of occupying a hotel or motel room in the City. Cathedral City's TOT rate is 10%, which is added to the occupant's hotel bill and remitted to the City by hotel/motel operators on a monthly basis. The following table describes TOT revenue trends since Fiscal Year 1995/96, and shows that TOT revenues have grown nearly 65% during this six-year period. The first significant increase in revenues occurred between in FY 98/99, when revenues increased by 30% over the previous year. The City anticipates that they will reach $1.3 million during FY 00/01.

Table III-46
Transient Occupancy Tax Revenue Trends

Fiscal Year	TOT Revenue
1995/96	$788,119
1996/97	$853,249
1997/98	$857,276
1998/99	$1,120,397
1999/00	$860,000
2000/01	$1,300,000

Note: Actual revenues are shown for FY 95/96 through 98/99. Adopted revenues are shown for FY 99/00 and 00/01. Source: Adopted Operating Budget, Cathedral City, Fiscal Year 2000/01.

In addition to the direct revenue generated by transient occupancy taxes, tourists also spend a considerable amount at local restaurants, shops, and recreational/cultural attractions. These expenditures translate into increased sales tax revenues for the City and increased earnings for the local labor force, much of which is ultimately funneled back into the local economy.

The City could potentially capture a larger share of the tourism industry by attracting high-quality hotels and/or bed and breakfast facilities to its newly revitalized Downtown Redevelopment Area. According to the Downtown Precise Plan, land south of East Palm Canyon Drive and west of Cathedral Canyon Drive is designated for Bed and Breakfast (BB) development. These lands could accommodate a total of approximately 500 rooms, including 285 bed and breakfast rooms, 175 senior hotel rooms, and 40 rooms for people with special needs. Vacant commercial lands in the vicinity of the I-10/Date Palm Drive interchange may also be appropriate for future hotel/motel development. Interstate-10 provides essential inter-city and inter-regional access and is a critical part of the local road network moving people and goods into and out of the Coachella Valley. In the vicinity of Date Palm Drive, it carries approximately 54,000 automobiles per day.

The construction of an attractive and well-planned hotel/motel and other highway-serving commercial development at this location would serve the traveling public and allow the City and local businesses to capture a share of the drive-by market.

Commercial Development Opportunities

Analysis of existing commercial development in Cathedral City and the spending patterns of City residents indicates that the attraction of large-scale, high-volume retail outlets should be one of the areas of focus of the City's economic development strategy. This type of development will allow the City to tap into the regional retail market, capture a larger share of regional sales tax revenues, and generate additional employment opportunities for City residents.

There are several large, undeveloped properties in the City, with physical attributes that are ideal for the retail environment. These include the 40-acre business park at the northeast corner of Da Vall Drive and Ramon Road, and the 80-acre parcel immediately west of the state-owned rehabilitation center on Ramon Road. Both of these sites are accessible to existing high traffic volumes on Ramon Road and could accommodate a wide range of mixed-use, community commercial developments. Land at the southeast corner of Date Palm Drive and Vista Chino is designated for General Commercial purposes, with Industrial land immediately to the east. This site is ideally situated for large-scale retail development, will benefit from its location adjacent to Date Palm Drive and Interstate-10, and could potentially attract a significant share of the regional market. Each of these sites offers important opportunities for the creation of high-quality, integrated retail developments. Such efforts may take place within the parameters of somewhat refined master plans that provide for coordinated access, parking, and pedestrian open spaces. Major utilities and public infrastructure are already in place to serve these sites and will generally require only site-specific extensions and modifications.

Industrial Development

Industrial development can bring stable and generally higher paying jobs to a community and can induce development in a variety of secondary or supporting industries. The success of industrial development is dependent upon several factors, including site accessibility, the availability and affordability of utilities, labor force quality, and the public policy environment, as it pertains to industrial growth. With the exception of the agri-business sector that dominates the eastern Coachella Valley, industrial activity in the Coachella Valley has traditionally been limited to light industrial and industrial park development, which includes contractors/ construction companies, auto repair/parts services, and commercial tenants such as insurance agencies, realtors, tax/financial advisors, and related service providers.

An analysis of land use designations indicates that Cathedral City has allocated sufficient acreage to accommodate future industrial development. Land costs are generally low, and parcels are available in variable lot sizes, ranging from a few to many acres. Within the General Plan planning area, lands designated for industrial or business park uses are concentrated in two general locations: 1) in the vicinity of Perez Road, between the Downtown Redevelopment Area and the Whitewater River Stormwater Channel, and 2) adjacent to the Interstate-10/Union Pacific Railroad corridor.

The Perez Road corridor is nearly built-out and contains a combination of industrial and service-related businesses, such as auto repair/parts companies, printing/art supply shops, and heating/air conditioning repair services. Significant industrial acreage near the I-10 freeway corridor remains vacant. These parcels are ideally situated to take advantage of the convenient truck access provided by Interstate-10 and Date Palm Drive, and the potential freight rail access provided by the Union Pacific Railroad. However, future development opportunities in this vicinity will be constrained by environmental factors, including extremely high winds and blowing sand and dust emanating from the San Gorgonio Pass, and occasional flooding and runoff associated with the Salvia Wash and Indio Hills. Development north of I-10 will require the extension of water, sewer, and other utilities, as well as the construction of local roads and other site-specific improvements.

New Construction Trends

Since 1990, new construction valuations have increased steadily, with single-family construction representing the lion's share of new development. As shown in Table III-47, below, since 1997, the number of new single-family residential permits issued has increased nearly four-fold, from 98 permits in 1997, to 483 in 2000. Single-family building permit valuations have increased more than five-fold, from about $14.4 million in 1997, to more than $75 million in 2000. The level of multi-family development has fluctuated even more widely over the past four years, with the number of permits ranging from a low of one permit in 1997, to a high of 22 in 1999. Multi-family residential valuations have also fluctuated widely, from a low of $205,700 in 1997, to a high of $16.6 million in 1999. Much of the new residential development has been concentrated in the northerly portion of the City, north of McCallum Way.

The "Commercial" category described in the table below includes both commercial and industrial development. However, new industrial development has been extremely limited, and City staff estimates that only one new building has been constructed on industrial-zoned land in recent years. The building is located at the corner of Date Palm Drive and Perez Road and is actually used more for retail, rather than industrial, purposes. Therefore, the "Commercial" category described below most accurately reflects commercial development trends in the City, and industrial development can be presumed to be more modest.

Commercial development remains an important contributor to the City economy, and although the level of new commercial construction slowed during 1998, it rebounded in 1999 and increased substantially in 2000. Since 1997, the number of new commercial building permits has range from d from a low of 14 in 1998, to a high of 32 in 1999. Commercial valuations have ranged $4.4 million in 1998 to nearly $24.3 million in 2000.

Table III-47
New Construction Trends
in Cathedral City, 1997-2000

Calendar Year/ Type of Construction	No. of Permits	Total Valuation
1997		
Single-Family Residential	98	$14,406,084
Multi-Family Residential	1	$205,700
Commercial*	18	$13,135,035
Total	**117**	**$27,746,819**
1998		
Single-Family Residential	310	$45,611,980
Multi-Family Residential	7	$4,677,622
Commercial*	14	$4,489,433
Total	**331**	**$54,779,035**
1999		
Single-Family Residential	391	$60,622,892
Multi-Family Residential	22	$16,672,629
Commercial*	32	$14,725,280
Total	**445**	**$92,020,801**
2000		
Single-Family Residential	483	$75,048,030
Multi-Family Residential	15	$2,987,601
Commercial*	22	$24,293,747
Total	**520**	**$102,329,378**

* Includes both commercial and industrial development, although industrial development generally has been limited. Source: Cathedral City Building and Safety Department.

Agua Caliente Lands

The Agua Caliente Band of Cahuilla Indians owns four complete and three partial Sections of land within the City limits (one Section equals 640 acres). These Sections of land are generally distributed in an alternating checkerboard pattern, and some include undeveloped parcels, which have been marketed for ambitious development projects in the past, such as lodging facilities, regional shopping centers, and recreational and cultural complexes. The construction of such large-scale development projects typically requires the assembly of numerous adjoining Indian allottee properties, and the leasing and development of these lands is subject to multi-party negotiations between the Agua Caliente, Bureau of Indian Affairs (BIA), and City of Cathedral City.

Tribal lands comprise a substantial portion of the City and occur in strategic locations, including immediately adjacent to the Interstate-10 and Date Palm Drive corridors, and within walking distance of the Downtown Redevelopment Area. If the full development potential of these lands is to be realized, development agreements will need to be secured and negotiations undertaken between private developers, utility providers, realtors, the Agua Caliente, Bureau of Indian Affairs, City of Cathedral City, and other parties. The cultivation of a cooperative relationship between the Agua Caliente, BIA, and City is essential to the implementation of the City's long-range economic development goals and should be continually pursued.

FUTURE DIRECTIONS

Although the City has generally recovered from the economic recession that impacted Southern California during the early 1990s, its economy has not fully regained the vigor it enjoyed during the 1980s. The City has responded with aggressive action and innovative planning, namely its Downtown Redevelopment project, which serves as a physical focal point and community gathering place, defines a centralized shopping and entertainment district, and is expected to provide the impetus for new capital investment and redevelopment along the East Palm Canyon corridor. The role of the Redevelopment Area in the local and regional retail market is still being defined, and its ability to meet the needs of the shopping public need to be continually re-evaluated.

The City must also exploit other opportunities for economic development. In particular, it must develop and implement strategies to effectively compete with the retail industry boom that has occurred in the central/eastern Coachella Valley in recent years. Economic policies and programs should be directed at attracting employment-generating businesses, which may include high-quality visitor accommodations (hotels, inns, bed and breakfasts), light industrial development, and a broader menu of commercial establishments. This will help the City balance the ratio of housing to jobs and encourage residents to work and spend within the City limits. The City can capture a share of the tourist drive-by market by expanding highway-serving commercial development at the I-10/Date Palm Drive interchange. Revitalization of the Downtown provides the City with new opportunities to attract vacationing homebuyers and retirees, by facilitating the development of second homes and non-resident condominiums.

An essential component of any economic development plan is the effective marketing of the City as a business-friendly community. This may require the preparation of site-specific property profiles, the publication and distribution of information describing the local regulatory environment, business assistance services, and the willingness to offer economic incentive programs and strategies. The City's web site is one of the most important and cost-effective marketing tools available, and should be expanded to allow prospective land and business developers to peruse demographic data, maps and descriptions of lands available for negotiation and development, and other community information.

GOAL, POLICIES AND PROGRAMS

Goal

A balanced, broadly-based economy that provides a full range of economic and employment opportunities, while maintaining high standards of development and environmental protection.

Policy 1
General Plan land use designations and allocations should facilitate a broad range of residential, commercial, industrial, and institutional development opportunities.

Program 1.A
The City should routinely monitor the remaining capacity of all General Plan land use categories to assure that a variety of economic development opportunities are available.
Responsible Agency: Planning Department, Redevelopment Agency
Schedule: Continuous

Policy 2
The Downtown Redevelopment Area, particularly that portion immediately adjacent to East Palm Canyon Drive, should continue to be promoted and recognized as the City's premier retail and entertainment district.

Policy 3
The City should take a proactive role in the retention of existing businesses and the recruitment of new businesses, particularly those which generate and broaden employment opportunities, increase discretionary incomes, and contribute to City General Fund revenues.

Program 3.A
Prepare, distribute, and routinely update a marketing package consisting of site-specific property profiles for developable parcels, local demographics, and information describing the regulatory environment and potential economic incentives.
Responsible Agency: Economic Development Department, Planning Department, Redevelopment Agency, Chamber of Commerce
Schedule: Immediate; Continuous

Policy 4
Encourage and promote infill development and orderly and logical development patterns which decrease the costs, and increase the efficiency of new utilities, infrastructure, and public services.

Program 4.A
The City shall consider developing a package of economic incentive programs which benefit developers of infill projects.
Responsible Agency: Redevelopment Agency, Finance Department, Economic Development Department
Schedule: Immediate; Continuous

Policy 5
Attract a greater number of visitors, retirees, and seasonal residents by facilitating the development of high-quality second homes, hotels/motels, condominiums, and/or bed and breakfast facilities in close proximity to shopping and entertainment venues.

Program 5.A
The Land Use Element and Zoning Ordinance shall facilitate the development of high-density dwellings in the Downtown Redevelopment Area and other appropriate locations.
Responsible Agency: Planning Department, Redevelopment Agency
Schedule: Immediate

Policy 6
Encourage and facilitate highway-serving commercial development at the Interstate-10/Date Palm Drive interchange within the City limits.

Program 6.A
Establish and implement strategies that gain and/or expand City access to the I-10 corridor and actively promote the development of attractive, functionally-planned commercial service facilities to capture a share of these drive-by markets.
Responsible Agency: Planning Department
Schedule: Immediate; Continuous

Policy 7
In order to maintain existing economic activities and attract new commercial and industrial development, the City should assure the provision of adequate utilities, infrastructure, and other capital facilities.

Program 7.A
Plan and coordinate the provision of major infrastructure through the development, implementation, and updating of master capital improvement programs that address commercial and industrial development needs.
Responsible Agency: Planning Department, City Engineer, Public Works Department, Coachella Valley Water District, Desert Water Agency, CalTrans
Schedule: Immediate; Continuous

Program 7.B
Consult and coordinate with CalTrans to maximize the efficiency of Interstate-10 and its interchanges.
Responsible Agency: City Engineer, CalTrans
Schedule: Immediate; Continuous

Policy 8
All development interests, including residential, resort, commercial, and industrial project proponents, shall be responsible for their fair share of on-site and off-site improvements required to support their development proposals. Such improvements may include, but are not limited to, street construction and signalization, utility extensions, drainage facilities, and parks.

Policy 9
The City should make every effort to continue to expedite the processing of development proposals which support the economic goals of the community.

Program 9.A
Continue to streamline and expedite the development review process through the concurrent processing of applications and efficient design review, without sacrificing quality development.
Responsible Agency: Planning Department, Redevelopment Agency, City Council
Schedule: Immediate; Continuous

Policy 10
Continue to cultivate cooperative relationships with the Agua Caliente Band of Cahuilla Indians and Bureau of Indian Affairs, particularly regarding the development of Indian lands within the City limits and sphere-of-influence.

Policy 11
Encourage and promote special events and activities, which strengthen the City's image and attractiveness to residents, visitors, and businesses.

Program 11.A
The City will work with the Chamber of Commerce to ensure that the Chamber has up to date demographic and special event information which it can distribute to the general public.
Responsible Agency: City Manager's Office, Economic Development Department, Chamber of Commerce
Schedule: Immediate; Continuous

CITY OF CATHEDRAL CITY

COMPREHENSIVE GENERAL PLAN

CHAPTER IV

ENVIRONMENTAL RESOURCES

This chapter of the General Plan discusses the environmental resources of the City and surrounding areas. The elements addressed in this chapter include Biological Resources, Archaeological and Historic Resources, Water Resources, Air Quality, Open Space and Conservation, and Energy and Mineral Resources. The City of Palm Desert has substantial environmental resources which contribute to the quality of life for City residents and attract a significant tourist trade. This chapter addresses the importance of and need for conservation of these valued resources.

BIOLOGICAL RESOURCES ELEMENT

PURPOSE

The purpose of the Biological Resources Element is to preserve and protect the integrity of the natural environment and its many biological resources. For the purposes of this element, biological resources represent the plants and wildlife species, as well as the ecosystems and habitats, which contribute to an area's natural setting. These resources not only enhance and contribute to the natural environment; but they also add to the health, identity and image of the built environment. This element describes the natural environment and identifies the important and valuable biological resources occurring within Cathedral City and the surrounding area. It also references other information sources, which are intended to guide decision makers in regulating land use and development, while protecting these critical resources. The goals, policies, and programs set forth in this element are designed to ensure the long-term preservation of biological resources in a manner, which benefits the entire community.

BACKGROUND

The Biological Resources Element has a direct relation to important policy issues in the Land Use and Open Space Elements. It is also related to the Parks and Recreation Element, which addresses the community's enjoyment of, and commitment to its natural resources. Cathedral City has been an active participant in the development of the Coachella Valley Multiple Species Habitat Conservation Plan, which is a regional effort to conserve adequate, unfragmented habitat for a wide range of special-status plant and animal species. In addition, portions of the City are included in the Santa Rosa Mountains Wildlife Habitat Area that has been established to protect sensitive Peninsular Bighorn habitat from potentially adverse development. The General Plan study area is also home to the Willow Hole-Edom Hill Preserve, a unique blowsand preserve that provides critical habitat to the special-status Coachella Valley Fringe-toed Lizard. The Biological Resources Element will influence and contribute to the effective implementation of conservation strategies, goals, policies, and programs.

The City is required to include an element, which provides for the preservation and conservation of wildlife resources by California Government Code Section 65302(d). This section of the Code also requires that the City provide inventories of natural vegetation, fish and wildlife and their habitat, including rare and endangered species in the General Plan. This element also includes, as required, goals, policies and programs, as well as plans and maps showing where important areas for the preservation of plant and animal life, including habitat for fish and wildlife species, and areas required for ecological and scientific study, are located.

There are also many state and federal regulations that have been established to protect and preserve biological resources. The Endangered Species Act is one of the most valuable laws for protecting species and habitat. It acts to identify all endangered species, and to increase their

populations to sustainable levels. In addition to the Endangered Species Act, California has several additional laws and regulations that directly and indirectly protect plant and wildlife species, such as the California Endangered Species Act, Section 404 of the Clean Water Act, and the Natural Community Conservation Planning Act.

The Regional Environment

The Coachella Valley's environment has many physical attributes which have a direct effect on the type of habitats and biological communities that exist within the region. In the Valley, these attributes are largely shaped by the geographic location, climate, topography and geology of the area. The following discussion provides a brief description of these conditions in the Coachella Valley, and how they take shape to form the basis for habitat and biological resources in the planning area.

Topography

The Coachella Valley is characterized by extreme variation in topographic features, from the low-lying desert floor to the hillsides and mountain ranges that surround most of the Valley. The Salton Sea, located at the southeast end of the Valley, occurs at an elevation of about 228 feet below sea level and has no natural outlet. The northern, western and southern edges of the Valley are bordered by major mountain ranges, including the San Bernardino, Little San Bernardino, San Jacinto and Santa Rosa Mountains. Summit elevations range from 9,600 feet to 11,502 feet above mean sea level. These topographic characteristics are primarily a result of the San Andreas, San Jacinto and other regional seismically active earthquake faults. These faults have uplifted, subsided and shifted the ground, forming the Valley's contrasting features, while erosion, weathering and other secondary geological processes shaped the mountains into a series of canyons and alluvial fans that extend onto and fill the valley floor with sediment and sand. This unique, expansive and varying geography has created a distinctive desert environment, one with a number of intricate habitats, wildlife and plant communities that make the region a rich resource area.

Climate

The region's climatic conditions are greatly influenced by the mountain ranges to the west, which block the Valley from much of the cooler maritime conditions that occur in the Inland Empire. These mountain barriers isolate the Valley and create a subtropical desert environment characterized by low rainfall, low relative humidity, and large levels of direct sunshine, with very hot summers and mild winters. Daytime temperatures during the summer months generally exceed 100° F, sometimes reaching more than 120° F. In the winter, daily temperatures range from 80°F to 30°F. The surrounding mountains, however, are cooler than the valley floor and have an approximate 5°F decrease for every 1,000-foot increase in elevation. Mean annual rainfall ranges between four and six inches on the desert floor, and about fifteen inches in the nearby mountains on the northern and western end of the Valley. The majority of precipitation occurs during the winter months, but infrequent intense thunderstorms may occur during late summer and early fall. However, most of the rainfall generated by these storms falls on surrounding mountain slopes, keeping the desert floor relatively dry throughout the year.

Wind also has a significant effect on the climate of the Coachella Valley. As the desert floor heats up, cool air from the west is drawn into the Valley through the narrow San Gorgonio Pass. This concentrates the air currents and generates strong winds, which pass over the most erosive portions of the valley floor, transporting large quantities of sand and dust throughout the region. This natural sand migration and transport process is responsible for creating desert sand dunes, which are an important habitat for native wildlife.

Plants and animals in this climate survive by utilizing a variety of structural and behavioral adaptations to conserve water and endure the heat. Plants have adapted mechanisms in their leaf structure, such as tissues that can store water and thick epidermal layers, which help reduce water loss from evaporation. Many plants also produce leaves seasonally, and have spines and thorns to discourage predators while also providing shade. Animals escape the main onslaught of daytime heat by hiding in burrows or shelters, and emerging only at night to hunt for food and water. Some animals can obtain most of the moisture they need from grains and seeds they eat, and they have adaptations that allow them to eliminate body wastes without losing moisture.

COACHELLA VALLEY DESERT HABITATS AND NATURAL COMMUNITIES

The Coachella Valley is located in one of the hottest and driest parts of the country, making it a harsh and sometimes inhospitable place to live. Nevertheless, the Coachella Valley Desert comprises one of the most biologically unique and diverse regions in the country. Vegetation on the desert floor is sparse and limited by heat and aridity. The climate becomes milder away from the desert floor, as elevation increases. These hillside and mountainous areas support more vegetation, including as many as nine species of cacti, a variety of woody plants such as palo verde and smoke tree and many herbaceous plants. In addition, they also contain a number of canyons and ravines, which collect snowmelt and runoff from the surrounding mountains. These niches in the mountainside support native fan palm communities and a wide variety of other plants and animals.

Plant communities are an important factor in determining the type of habitat and natural community in an area. Habitat describes the place or set of environmental conditions in which plants and animals naturally live and grow. Habitats are more specific descriptions of locations within a region, which have a distinct assortment of species. Temperature and precipitation are primary factors in determining locations of different habitats. However, in the Coachella Valley and surrounding areas, desert habitats are generally divided into topographical habitats that are identified by physical differences in slope, substrate and water supply.

Valley Floor

Open space lands within the central portion of the Coachella Valley encompass the valley floor habitat. This habitat is characterized by relatively flat and low-lying terrain, with sparse vegetation and regions of blowing sands. The valley floor habitat contains active desert dunes, and stabilized and partially stabilized sand dunes and fields. These areas consist of aeolian, or windblown, sand deposits, which originated from the erosion of adjacent hills, sand deposition in nearby ravines, and sandy soils transported by strong winds. Active dunes are situated in areas on the valley floor that are highly exposed to the elements and are subject to intense heat and

high wind conditions. The high winds continually amass and remove sand from the active dunes. "Active" means that the area has no windbreaks or other impediments to hinder the aeolian processes that cause sand accumulation and depletion in the sand fields. Because the dunes are continually shifting and accumulating sand, perennial plant cover is very low, and much of the surface is barren for most of the year. Vegetation that does occur is largely limited to species such as primrose (*Oenothera*) species, desert dicoria (*Dicoria canescens*), and sand verbena (*Abronia villos*a). Stabilized and partially stabilized sand fields are sand accumulations that lack the structure of sand dunes and are considered a Community of Highest Inventory Priority (CHIP) by the State. In these areas, vegetation grows more readily and consists primarily of a variety of scattered perennial herbs and shrubs. The most visible and abundant type of vegetation within this valley floor community is the creosote bush (*Larrea tridentate)*, which is an evergreen shrub. Other perennial shrubs include sand verbena (*Abronia villosa*), dalea (*Dalea*) species, and burrobush (*Oenothera deltoides*). Plants that have been identified in sand fields near the Whitewater River flood channel include four-winged saltbush (*Atriplex canescens*), Indian ricegrass (*Achnatherum hymenoides*), sandpaper plant (*Petalonyx thurberi*), and Devil's lantern (*Oenothera deltoides*).

The planning area contains two active sand transport systems. Sand accumulations in the Willow Hole-Edom Hill Preserve are dominated by extensive mesquite thickets that are supported by a high water table and blowing sand. The Willow Hole-Edom Hill Preserve provides critical blowsand habitat to the Coachella Valley Fringe-Toed Lizard and other sensitive species. Historically, the valley floor, particularly along the Whitewater River, has functioned as an active sand transport corridor for aeolian deposits blowing from the northwest. However, urban development in Cathedral City and Palm Springs to the west has restricted sand movement and resulted in a loss of this sensitive habitat.

Most of the development within the planning area and the region has occurred along the valley floor. As a result, the open space lands that comprise the valley floor habitat are largely fragmented and disturbed. As development and growth continue, this habitat will continue to shrink, removing valuable examples of plants and wildlife.

Sandy Washes

The desert wash habitat consists of channels and watercourses that drain the mountains surrounding the Valley. As washes emerge from canyon mouths, they form deep channels that cut through the alluvial plain. Farther from the canyons, washes become shallower, broader and less defined, and the physical differences between the washes and the alluvial plain diminish.

The Desert Dry Wash Woodland plant community typically occurs in gravelly washes, although it is known to occasionally integrate with the valley floor's creosote bush scrub community. The Dry Wash Woodland is dominated by palo verde (*Cercidium floridum*) and smoke tree (*Psorothmnus spinosus*), but also includes desert willow (*Chylopsis linearis*), desert lavender (*Hyptis emoryi*), and cheesebush (*Hymenoclea salsola*). This vegetation community occurs at the Willow Hole-Edom Hill Preserve, as well as limited locations along the Whitewater River.

Desert wash habitat often serves as travel corridors for wildlife that are supported by both the wash and the alluvial plain habitats. Birds are generally abundant in desert washes. Typical

species include verdin, phainopepla and black-tailed gnatcatcher. The largest desert washes in the planning area include the Whitewater River Wash, the Morongo Wash and the Long Canyon Wash. Channelization and control structures have been constructed along the majority of the Whitewater River. However, the Morongo Wash and Long Canyon Wash are located north of the freeway in predominantly undeveloped regions, and still support adequate and viable sandy wash habitat.

Alluvial Plain

Lands south of East Palm Canyon Drive and at the foothills of the Santa Rosa Mountains can be characterized as alluvial plain habitat. This habitat develops on flood-formed fans that extend from mountain canyons such as Cathedral Canyon in the Santa Rosa Mountains. At its highest points near the mountain ridges, the alluvial plain consists of coarse rock and sand that has accumulated from a number of large floods that began shaping the plain during prehistoric times. This material becomes smoother and sandier as the fan continues downward toward the valley floor. The habitat and communities found on these plains transition with increasing distance from the canyon mouths, as the substrate is slowly altered from rocky to sandy deposits.

Sonoran mixed woody and succulent scrub is the dominant plant community of the alluvial plain habitat. This community occurs along the lower slopes of the Santa Rosa Mountains and is widespread, forming the south edge of the Coachella Valley. Sonoran mixed woody and succulent scrub is a variant of the creosote scrub community, and is very typical of the Colorado Desert. Typical plant species found on the lower alluvial plain include creosote bush, indigobush (*Dalea schottii*), dyeweed (*D. emoryi)*, catclaw acacia (*Acacia greggii*), smoketree (*Dalia spinosa*) and Palo verde (*Cercidium floridum*). Plant distribution and variety changes farther up the plain, and a variety of cacti including pencil cholla (*Opuntia ramosissima*) and barrel cactus (*Ferocactus acanthodes*), as well as chuparosa (*Belaperone californica*) and desert lavender become increasingly common.

Desert Fan Palm Oasis Woodland

The Desert Fan Palm Oasis Woodland is a sensitive plant community considered to be a Community of the Highest Inventory Priority (CHIP) by the State of California. Its range extends from the Baja Peninsula to Death Valley National Monument, although occurrences of this plant community are discrete and isolated. Oases develop along geologic fault lines where ground water rises near the surface and is capable of supporting dense vegetation. The California fan palm (*Washingtonia filifera*), the largest palm in North America, dominates this community. Mature individuals can grow to 25 meters in height and almost one meter in trunk diameter. Other members of this plant community include desert baccharis (*Baccharis sergiliodes*) and arrowweed (*Pleuchea sericea*). A natural fan palm oasis community occurs at the Willow Hole-Edom Hill Preserve within the planning area, north of Interstate-10. Fan palm oases are also found within canyons of the Santa Rosa and San Jacinto Mountains, where natural streams flow from the snowmelt and runoff.

This habitat provides important cover and food to migrating and wintering birds as wells as birds of prey such as the golden eagle *(Aquilachrysaetos*) and the prairie falcon *(Falco mexicanus*). Other wildlife found within the desert fan palm community include the southern yellow bat, common kingsnake, desert slender salamander *(Batrachoseps aridus*), and the giant palm-boring

beetle (*Dianpate wrightii*). The Peninsular Bighorn sheep often visit the oases in the Santa Rosa Mountains to make use of the natural supply of water that flows through the woodland.

Rocky Slopes Habitat

The Santa Rosa Mountains , which extend from the edge of the alluvial plain at the south end of the planning area, comprise the rocky slopes habitat. This habitat is characterized by steep slopes and continuous rock that is either weathered and fractured bedrock, or broken and displaced into loose debris of sand, pebbles and stone. Because of the sharp slopes and extensive rock surfaces on the lower slopes, this habitat appears incapable of supporting vegetation. However, the rocky slopes habitat supports up to 102 perennials and 115 annual species. Plant density and size increase with elevation and associated increases in annual rainfall. Plants of the rocky slopes habitat include creosote bush, brittlebush (*Encelia farinosa*), burrobush (*Ambrosia dumosa*), agave (*Agave deserti*), Ocotillo (*Fouquieria splendens*), spike moss (*Selaginella eremophila*), Parry's cloak fern (*Notholaena parryi*), arrowleaf (*Pleurocoronis plurisetaa*), pigmy cedar (*Peucephyllum schottii*), bedstraw (*Rubiceae*), and crossosoma (*Crossosoma bigelovii*).

The rocky hillsides of the Santa Rosa Mountains, provide habitat for a different variety of plants and animals from those on the valley floor. Connectivity with the vast areas of wildlands in the Santa Rosa Mountains allows for the presence of wide-ranging animals, including bighorn sheep, as well as predators such as prairie falcon, golden eagle, bobcat and mountain lion.

SENSITIVE, RARE AND ENDANGERED SPECIES

As noted above, the Cathedral City planning area contains a wide range of significant biological resources. A number of these resources are species of plants and animals that are highly specialized and endemic to a single habitat. Due to the loss of viable habitat, some of these species have been listed as threatened or endangered by the federal and state governments. "Endangered" species refers to those with such limited numbers that they are considered in imminent danger of extinction, while "threatened" species are those that are likely to become endangered, particularly on a local scale, within the foreseeable future. "Sensitive" species are those that are naturally rare and that have been locally depleted and put at risk by human activities. Although the perpetuation of a sensitive species does not appear to be significantly threatened, they are considered vulnerable and are often candidates for future listing. The following tables list the endangered, threatened or sensitive species within the planning area.

Table IV-1
Sensitive Species Occurring or Potentially Occurring
In the Cathedral City Study Area

Species Name (Fed/State)	*(Scientific Name)*	Status
PLANT COMMUNITIES		
Desert Dry Wash Woodland	N/A	ND/CHIP
Sand Dunes and Fields	N/A	ND/CHIP
Desert Fan Palm Oasis Woodland	N/A	ND/CHIP
PLANTS		
California ditaxis	*(Ditaxis californica)*	FSC/ND
Coachella Valley milkvetch	*(Astragalus lentiginosus var. coachellae)*	FE/ND
Flat-seeded spurge	*(Chamaesyce platysperma)*	FSC/ND
Payson's jewelflower	*(Caulanthus simulans)*	FSC/ND
INVERTEBRATES		
Coachella giant sand-treader cricket	*(Macrobaenetes valgum)*	FSC/ND
Coachella Valley Jerusalem cricket	*(Stenopelmatus cahuilaensis)*	FSC/ND
Coachella Valley grasshopper	*(Spaniacris deserticola)*	FSC/ND
AMPHIBIANS AND REPTILES		
Desert tortoise	*(Gopherus agassizi)*	FT/ST
Desert slender salamander	*(Batrachoseps aridus)*	FE/SE
Flat-tailed horned lizard	*(Phrynosoma mcallii)*	FPT/CSC
Coachella Valley fringe-toed lizard	*(Uma inornata)*	FT/SE
Common chuckwalla	*(Sauromalus obesus)*	FSC/ND
BIRDS		
Ferruginous hawk	*(Buteo regalis)*	FSC/CSC
Golden eagle	*(Aquilachrysaetos)*	ND/CSC
Merlin	*(Falco columbarius)*	ND/CSC
Prairie falcon	*(Falco mexicanus)*	ND/CSC
Peregrine falcon	*(Falco peregrinus)*	FE/SE
Burrowing owl	*(Athene cunicularia)*	FSC/CSC
Crissal thrasher	*(Toxostoma crissale)*	ND/CSC
LeConte's thrasher	*(Toxostoma lecontei)*	FSC/CSC
Southwestern yellow flycatcher	*(Empidonax trailii extimus)*	FPE/SE
Least Bell's vireo	*(Vireo bellii pusillus)*	FE/SE
Yellow warbler	*(Dendroica petechia brewsteri)*	ND/CSC
Yellow-breasted chat	*(Icteria virens)*	ND/CSC
Summer tanager	*(Piranga rubra)*	ND/CSC
Osprey	*(Pandion haliaetus)*	ND/CSC
Northern harrier	*(Circus cyaneus)*	ND/CSC

Table IV-1 (Continued)
Sensitive Species Occurring or Potentially Occurring
In the Cathedral City Study Area

Species Name (Fed/State)	*(Scientific Name)*	Status
Sharp-shinned hawk	*(Accipiter striatus)*	ND/CSC
Cooper's hawk	*(Accipiter cooperii)*	ND/CSC
Long-eared owl	*(Asio otus)*	ND/CSC
Southwestern willow flycatcher	*(Empidonax traillii extimus)*	FPE/SE
Vermilion flycatcher	*(Pyrocephalys rubinus)*	ND/CSC
Bendire's thrasher	*(Toxostoma bendirei)*	ND/CSC
Loggerhead shrike	*(Lanius ludovicianus)*	ND/CSC
MAMMALS		
California leaf-nosed bat	*(Macrotis californicus)*	FSC/CSC
Spotted Bat	*(Euderma maculatum)*	FSC/CSC
California mastiff bat	*(Eumops perotis californicus)*	FSC/CSC
Yuma myotis	*(Myotis yumanensis)*	FSC/CSC
Western small-footed myotis	*(Myotis ciliolabrum)*	FSC/ND
Pale big-eared bat	*(Plecotus townsendii pallescens)*	FSC/CSC
Pallid bat	*(Antrozous pallidus)*	ND/CSC
Pocketed free-tail bat	*(Tadarida femorosacca)*	ND/CSC
Palm Springs ground squirrel	*(Spermophilus tereticaudus)*	FSC/CSC
Palm Springs little pocket mouse	*(Perognathus longimembris* ssp. *bangsi)*	FSC/CSC
Southern grasshopper mouse	*(Onychomys torridus* ssp. *ramona)*	FSC/ND
American badger	*(Taxidea taxus)*	ND/CSC
Peninsular bighorn sheep	*(Ovis canadensis cremnobates)*	FE/ST

Status Definitions:

FE Federally listed as "Endangered" FT Federally listed as "Threatened"
FPE Federally proposed or petitioned as "Endangered"
FSC Federal Species of Concern; this category replaces the previous "Category 2 Candidate Species", which was discontinued in February 1996 (U.S. Fish and Wildlife Service 1996).
SE State listed as "Endangered" ST State listed as "Threatened"
CSC California Species of Special Concern ND Species not designated

Ecosystem Management and Biodiversity Protection

Human life is inextricably linked to the natural environment. Native species provide us with a number of life-sustaining resources and services. Soil formation, waste disposal, air and water purification, nutrient cycling, solar energy absorption, and management of biogeochemical and hydrological cycles are all dependent on biodiversity. The Earth's ecosystems are composed of these interactions between species and the natural environment and represent the culmination of historic evolutionary processes of long standing. The complexity of these systems is not yet fully understood, but it is clear that each member of an ecosystem has an important role to fulfill.

Humans are the most dominant organisms on the earth, making use of more than half of the world's terrestrial ecosystems. While utilization of natural resources is necessary for human survival, many of our current practices are often disruptive and damaging to ecological processes and to the natural environment. The conversion of natural habitat to human uses is the largest single cause of biodiversity losses.

An important step towards protecting biodiversity is through the careful management of natural communities and ecosystems. Ecosystem management attempts to integrate ecological, economic and social goals in a unified approach. It recognizes that we cannot have sustained progress toward social goals in a deteriorating environment or economy, or vice versa. Each of these domains affects, and is affected by the others. Adapting legislation to restore, maintain and safeguard ecological systems will ensure the well being and security of future generations.

Public Land Agencies and Ecosystem Management

In addition to regulations and legislation regarding biological resources, there are also several public land agencies and non-profit organizations that focus on thoughtful ecosystem management and biological resource protection. While many of the lands that are owned and managed by these agencies and organizations provide for varying degrees of disturbance from recreational uses, the mandate for most is the safeguarding of cultural, scenic and biological resources.

Within the Valley there are several of public land agencies and non-profit organizations which work together frequently in managing the Valley's open space lands. Some of these agencies include the National Park Service, the United States Forest Service, the Bureau of Land Management as well as California state agencies including the California Department of Fish and Game, and the California Department of Parks and Recreation. Predominant non-profit organizations include the Mountains Conservancy and the Nature Conservancy.

Endangered Species Act

The U.S. Endangered Species Act (ESA) of 1973 provides much needed protection to biological resources, and is a dominant force in biodiversity protection. Congress passed the Endangered Species Act to "provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, and to provide a program for the conservation of these species." The Department of the Interior, acting through the U.S. Fish and Wildlife Service, is responsible for the protection of most threatened and endangered species. The Department of Commerce, through the National Marine Fisheries Service, has responsibility for marine mammals and anadromous fish. The structure of the ESA can be broken down into the following components:

1. Listing of species and designation of critical habitat,
2. recovery planning, and
3. prohibitions and exceptions to prohibitions.

Listing Endangered and Threatened Species

An "endangered" species is any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range, while a "threatened" species is any species of

animal, or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

"Candidate" species is a species for which substantial information is available to support a listing proposal, but for which a lack of funding and personnel preclude listing. The Secretary of the Interior is required to publish "notices of review" which list the status of candidate species. Currently (2001), the United States has 972 species on its endangered species list, 272 threatened species and 173 candidate species - many of which have remained on the candidate list for more than a decade. Species can be added to the list of endangered or threatened species for five reasons:

1. Current or threatened destruction of habitat;
2. Overuse of the species for commercial, recreational, scientific or educational purposes;
3. Disease or predation;
4. Ineffective regulatory mechanisms; and
5. Other natural or manmade factors affecting the species chances of survival.

Protecting Critical Habitat
Critical habitat is defined as the geographic area containing physical or biological features essential to the conservation of a listed species, or an area that may require special management considerations or protection. Neither federal agencies nor private landowners may destroy or adversely modify critical habitat of any listed species. More than 80 percent of all species listed as either threatened or endangered have no designated critical habitat.

Recovery Planning For Threatened and Endangered Species
The Endangered Species Act requires the Service to develop and implement recovery plans for all threatened and endangered species that occur in the United States. Recovery plans set forth what is needed for a species to "recover" to the point that it no longer needs the protections of the ESA. The plans must include specific management recommendations for the species and objective, measurable criteria which, when met, would signal the recovery of the species.

Prohibited Actions under the Endangered Species Act
The Act establishes broad prohibitions against "taking" endangered or threatened species. In other words, on both public and private lands of the U.S., it is illegal "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect" threatened or endangered animals. The Service has defined "harm" to include significant destruction of a species' habitat that results in actual death or injury.

Incidental Take Permits and HCPs
The ESA contains an exception to the strict prohibition against "take" in which the Service may permit a project to go forward and destroy threatened and endangered species and their habitat as long as the taking is "incidental" to, and not the purpose of, the project. This permit is commonly referred to as an "incidental take permit" (ITP).

The Service cannot issue an ITP unless the permit applicant submits a conservation plan known as a "Habitat Conservation Plan" (HCP). HCPs must specify the proposed project's impact to the species and include mitigation measures which will reduce the project's impacts. The City is currently (2001) participating in a Coachella Valley-wide HCP which is intended to protect a number of species (please see further discussion below).

California Endangered Species Act

The California Endangered Species Act (CESA), administered by the California Department of Fish and Game, largely parallels the federal law, and provides similar requirements and mandates to those described above. CESA, however, goes further than the ESA in that it prohibits the taking of both endangered species and those petioned for listing at the state level. CESA also includes plant species under its protection, where the federal ESA only protects plants on federally owned lands or where there is a federal nexus. In Cathedral City and other Valley communities, local government is responsible for ensuring that all proposed projects conform to the standards and mandates of both the federal and state Acts. The Coachella Valley Multi-Species HCP will conform to the standards of both laws, in order to receive incidental take permits from both the federal and state governments.

Habitat Protection

While the ESA is a powerful tool for biological resource protection, it generally focuses on individual species, rather than entire biological communities. Nevertheless, the driving force behind today's decline in species is the destruction, degradation and fragmentation of critical and essential habitat due to increasing human population and conversion of valuable open space land to urban uses. Human exploitation of our resources is the primary cause of habitat loss, degradation and fragmentation.

While habitat loss and degradation are obvious threats to species survival, habitat fragmentation is a less obvious threat. Habitat fragmentation has two parts: a decrease in the habitat type; and the allotment of the remaining habitat into smaller, more isolated pieces. The problems that arise from habitat fragmentation include smaller populations due to small amounts of habitat, isolation of populations into fragmented parts with less genetic diversity, and potential increase in predators, competitors and parasites. As a result, habitat fragmentation is one of the greatest threats to species and the ecosystems they rely upon for survival.

Habitat protection and the widespread preservation of ecosystems provide support for maximum biological diversity, and ensure the long-term protection of all species. The efforts being made through the Coachella Valley Multi-Species Habitat Conservation Plan propose to protect these ecosystems, and provide long-term viability for the species included in the Plan.

Santa Rosa and San Jacinto Mountains National Monument

On October 24, 2000, the President of the United States signed legislation creating the Santa Rosa and San Jacinto Mountains National Monument. The new Monument encompasses approximately 272,000 acres within the Santa Rosa and San Jacinto Mountains, with lands administered by the Bureau of Land Management (BLM), the U.S. Forest Service (USFS), California Department of Fish and Game (CDFG), the California Department of Parks and Recreation, the Agua Caliente Band of Cahuilla Indians, and the Coachella Valley Mountains

Conservancy in cooperation with the county, adjacent cities and private owners. The National Monument designation provides further protection and preservation of nationally significant biological, cultural, recreational, geological, wilderness, educational, and scientific resources. The benefits of the Monument designation include the enhanced potential for funding opportunities, increased cooperative management between the federal land agencies, and additional protection for the area's natural resources.

Willow Hole-Edom Hill Preserve

The Willow Hole-Edom Hill Preserve was established, as previously stated, to assist in preserving the federally listed Coachella Valley Fringed-toed Lizard, in the northern planning area of the City. The preserve, created through the implementation of the HCP for this species, provides an important environment for blowsand endemic species, and has grown over time to include 2,469 acres. Important biological resources found on the preserve include mesquite hummocks, a fan palm oasis, and habitat for the Coachella Valley milk vetch, Little San Bernardino Mountains gilia, Palm Springs ground squirrel, Palm Springs pocket mouse, burrowing owl, crissal thrasher, and the Coachella Valley giant sand treader cricket. The preserve is classified as an Area of Critical Concern (ACEC), with lands owned primarily by the Bureau of Land Management.

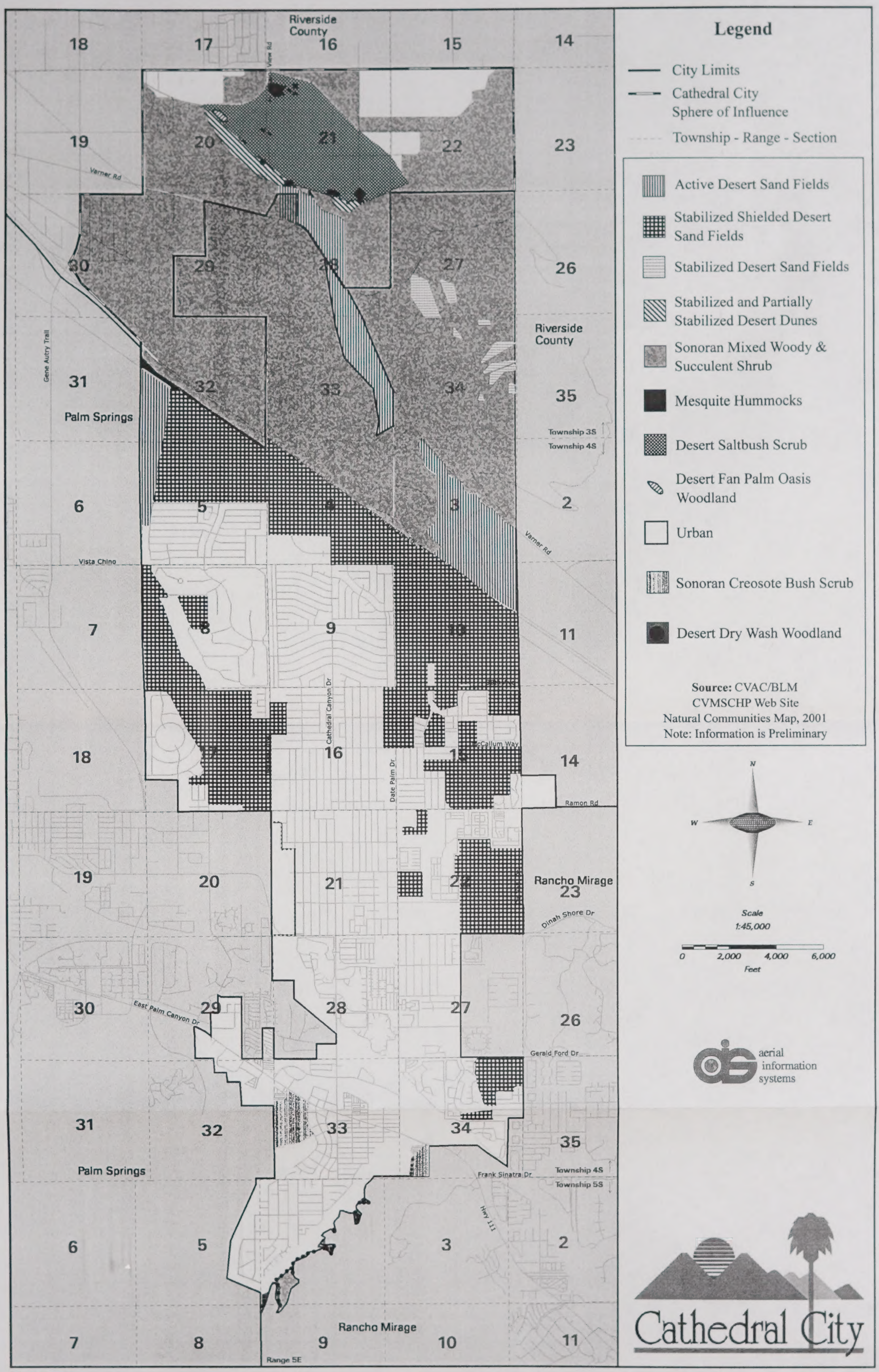
Coachella Valley Multiple Species Habitat Conservation Plan

The Multiple Species Habitat Conservation Plan (MSHCP) is currently being prepared by the Coachella Valley Association of Governments (CVAG) to develop principles, policies and regional proposals to conserve the Coachella Valley's biological resources and protect biological diversity on a regional scale. The Coachella Valley MSHCP is intended to balance environmental protection and economic development objectives and simplify compliance with endangered species-related laws.

The MSHCP's ecosystem approach recognizes the fragile and interconnected nature of biological communities, and focuses on entire natural systems. The Coachella Valley MSHCP is intended to provide a seamless network of adequate habitat for the protection and safekeeping of long-term viable populations of the species that are currently listed as threatened or endangered.

FUTURE DIRECTIONS

The Coachella Valley Multiple Species Habitat Conservation Plan is a good opportunity for the City of Cathedral City to work towards long-term protection of important biological resources. Not only does the plan preserve important plant and animal species, it also establishes a regional ecological system that will be able to support important and intact ecosystems and communities. The City needs to find ways to make the built environment more harmonious with the natural environment, and establish means for doing so. This can be achieved by implementing the General Plan, and through thoughtful adoption of Zoning, Subdivision and Grading Ordinances. The City also has the opportunity to regulate growth and limit impacts through community planning and development regulation.



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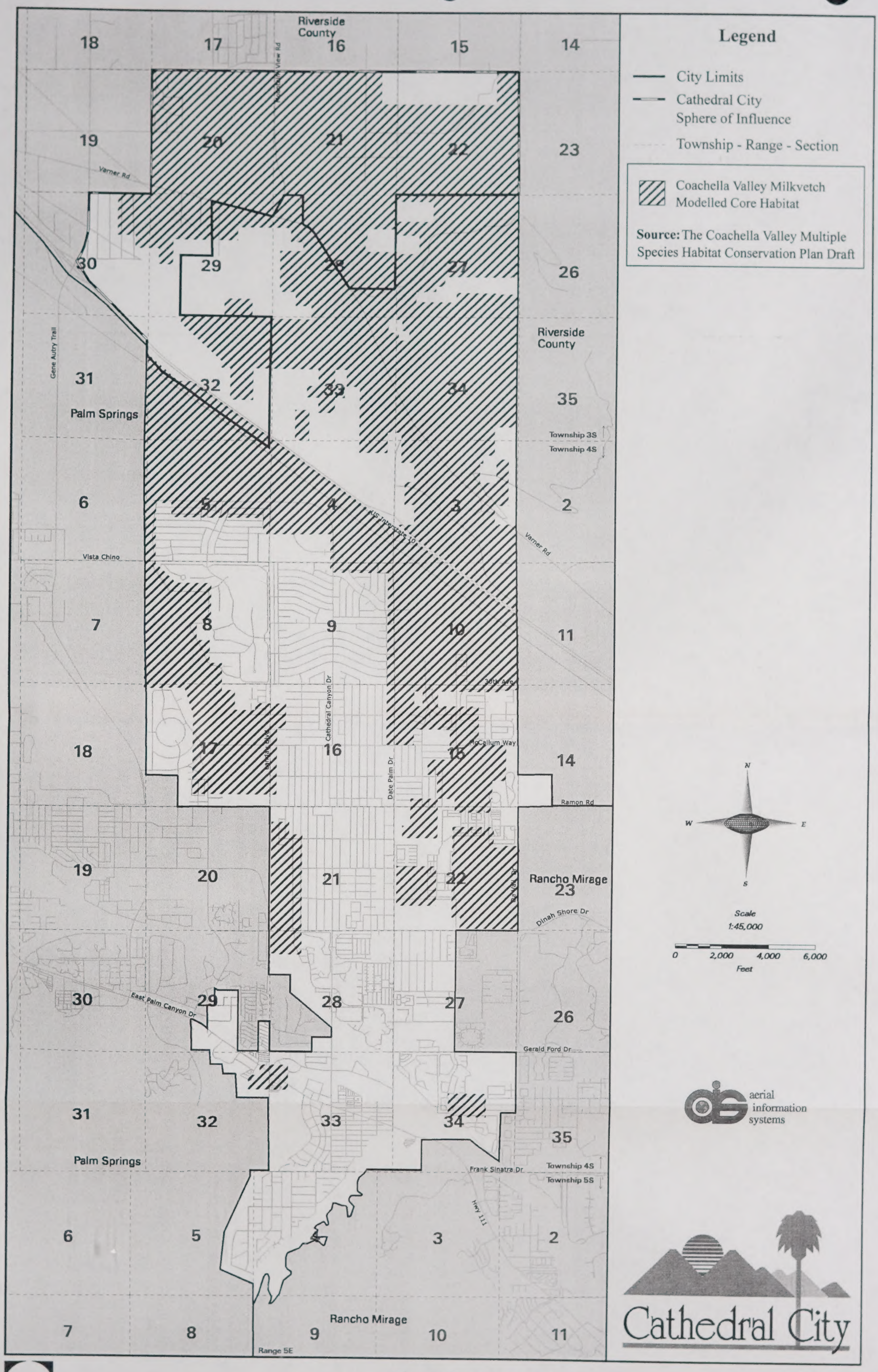
City of Cathedral City
General Plan
Natural Plant Communities Distribution

Exhibit
IV-1



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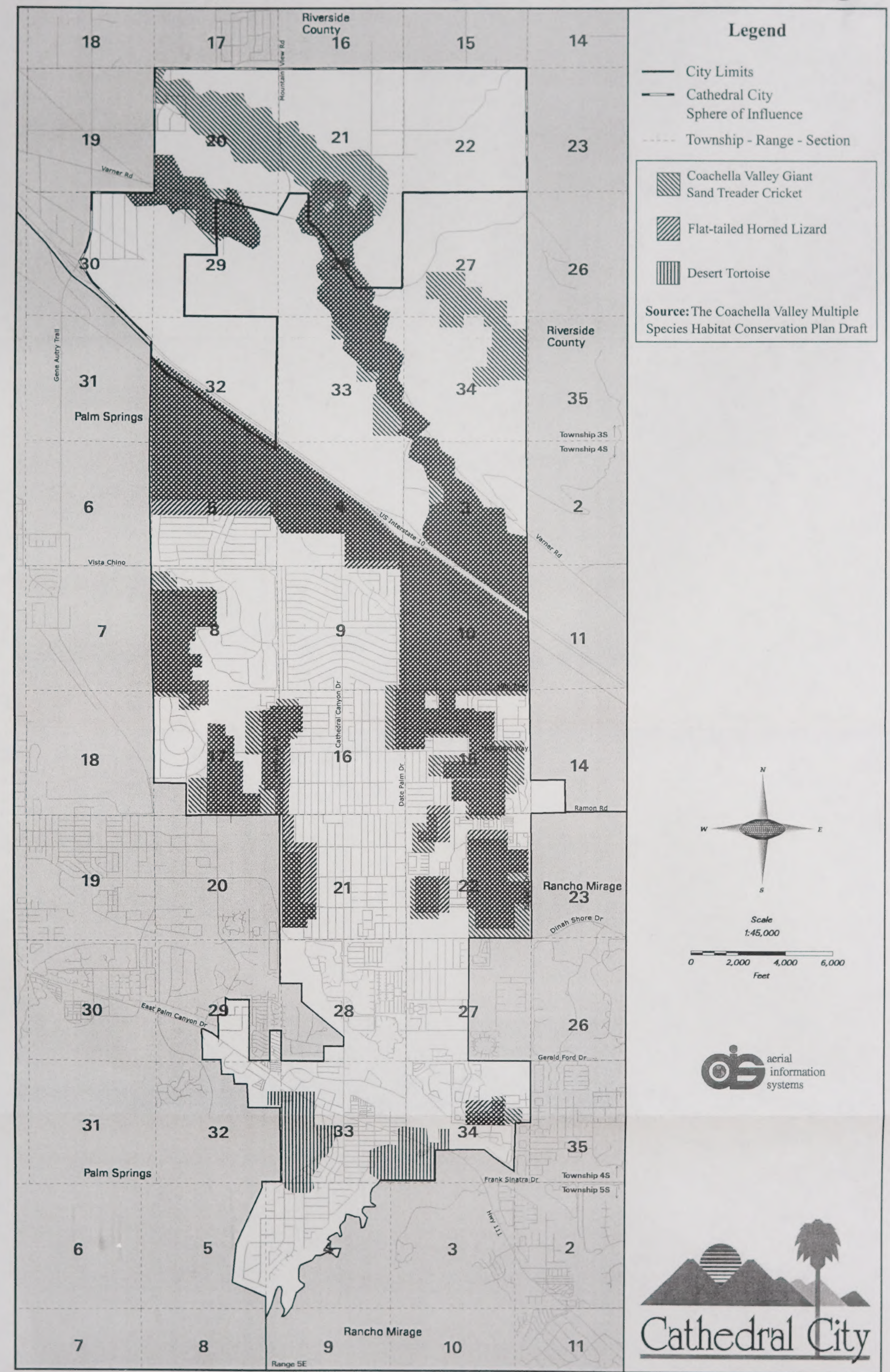
City of Cathedral City
General Plan
Coachella Valley Milkvetch Core Habitat

Exhibit
IV-2



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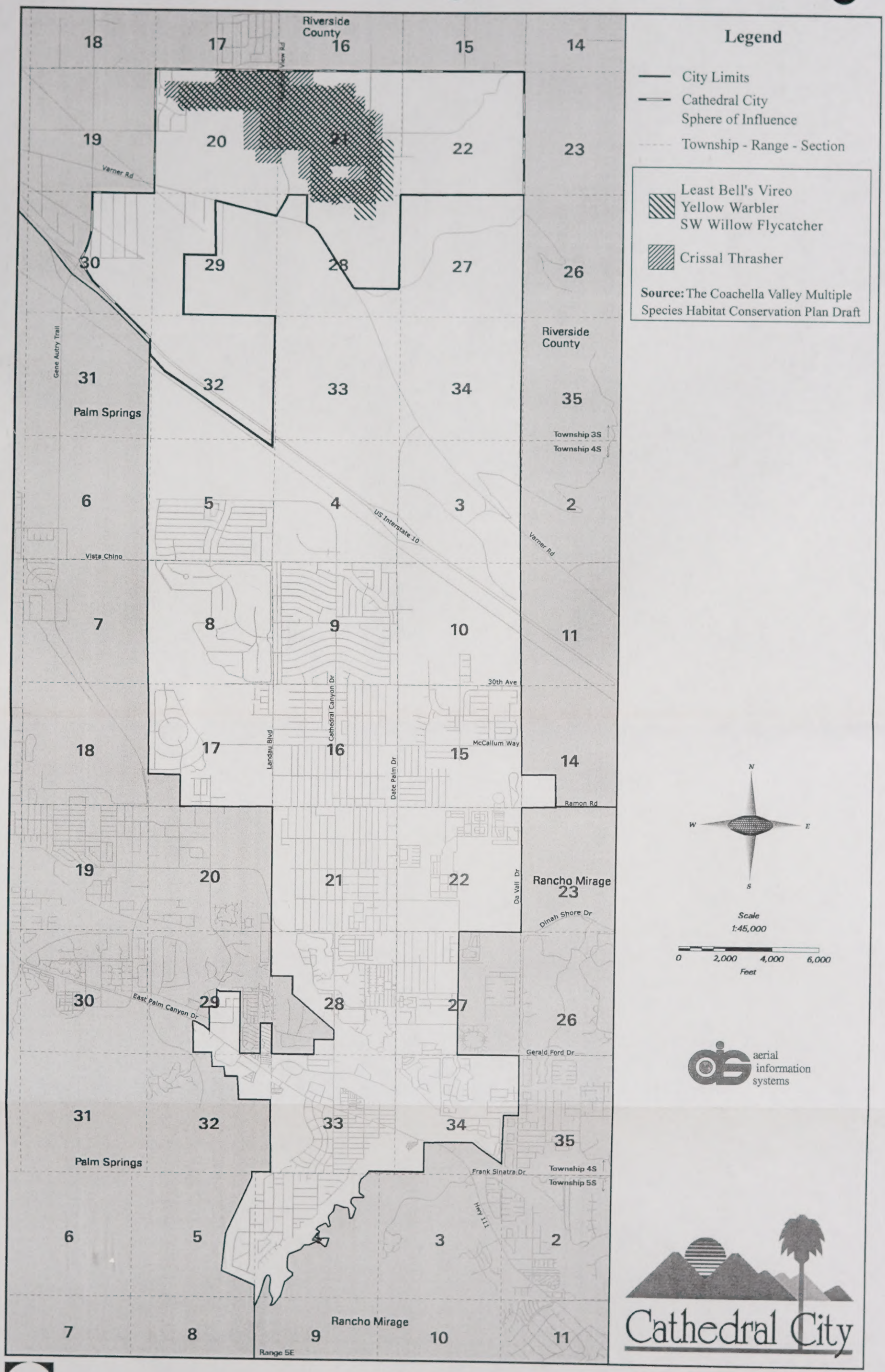
City of Cathedral City General Plan
Giant Sand Treader Cricket,
Desert Tortoise and Flat-Tailed Horned Lizard Core Habitats

Exhibit
IV-3



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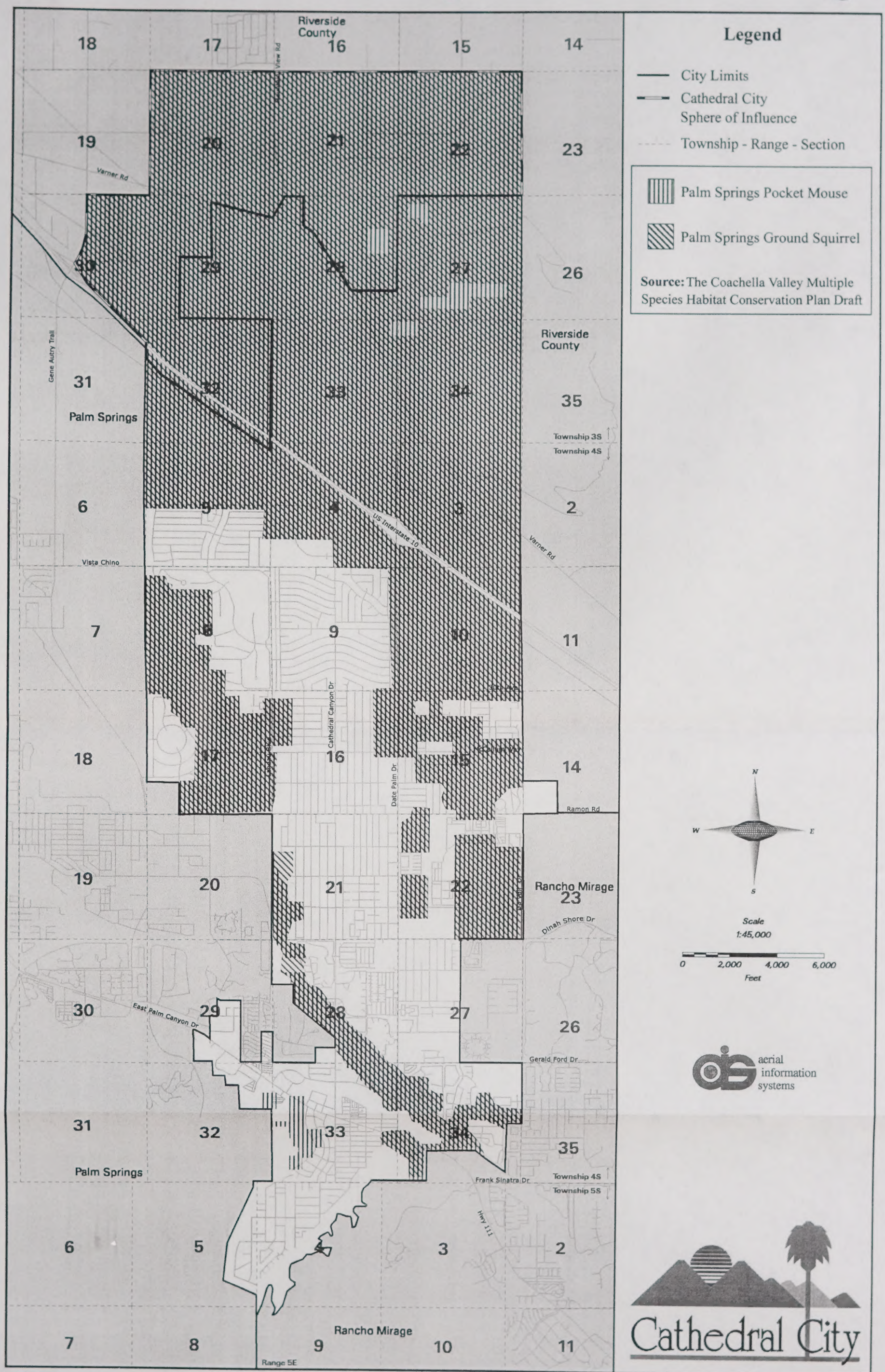
City of Cathedral City
General Plan
Sensitive Bird Species Core Habitat

Exhibit
IV-4



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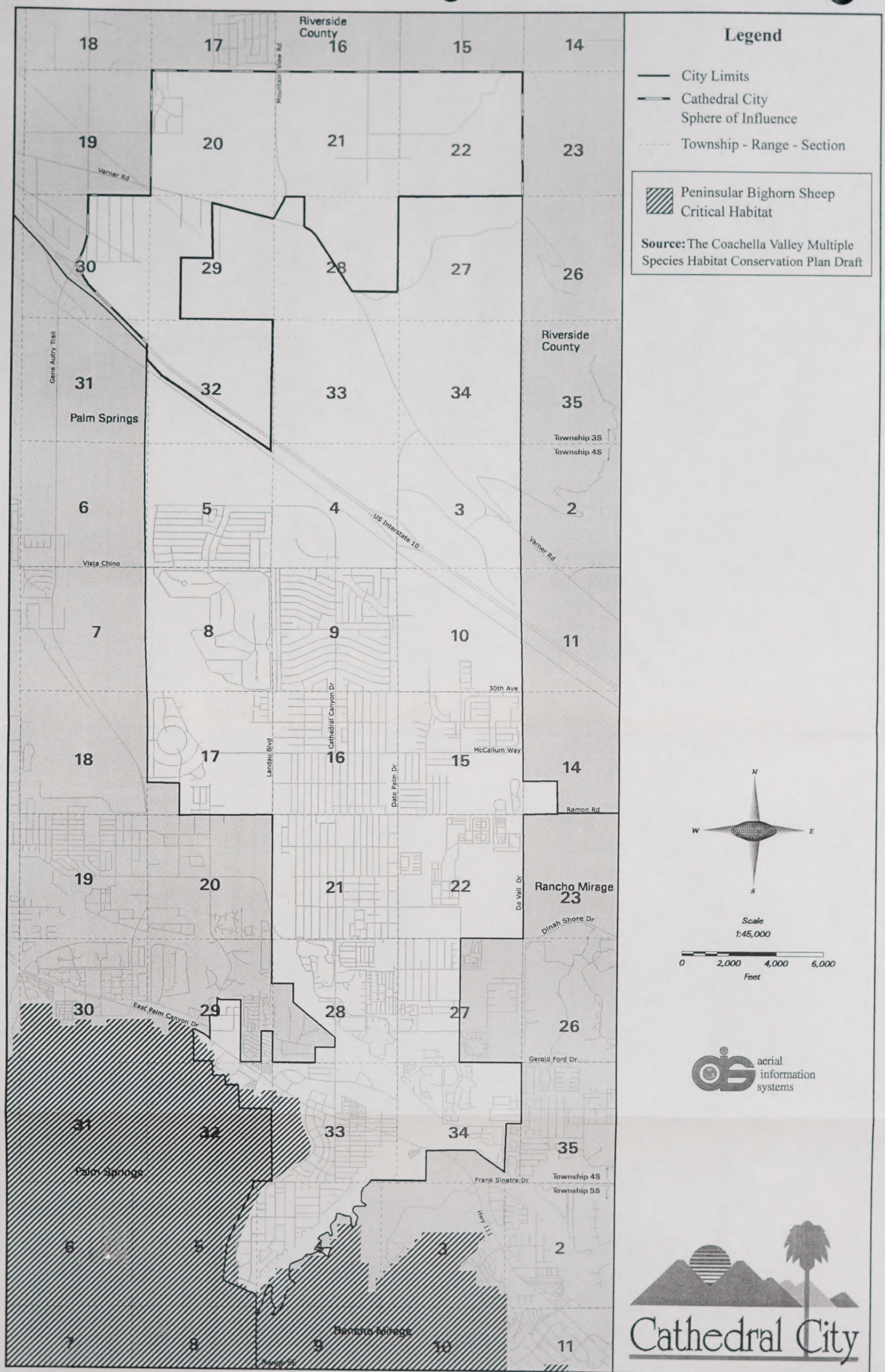
City of Cathedral City General Plan
Palm Springs Ground Squirrel and
Palm Springs Pocket Mouse Core Habitats

Exhibit
IV-5



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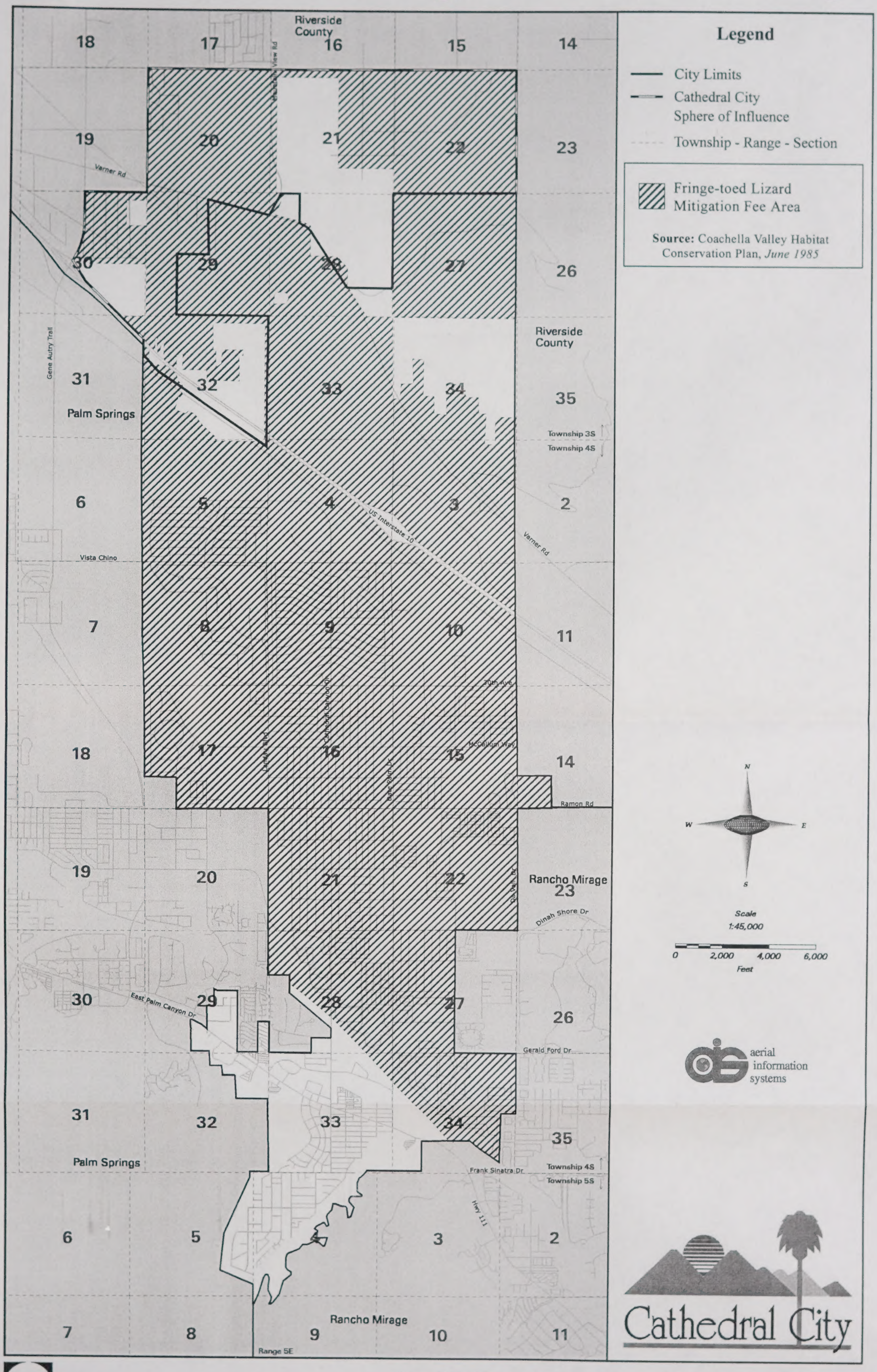
City of Cathedral City
General Plan
Peninsular Bighorn Sheep Critical Habitat

Exhibit
IV-6



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City of Cathedral City
General Plan
Coachella Valley Fringe-Toed Lizard HCP Fee Mitigation Area

Exhibit
IV-7

GOALS, POLICIES AND PROGRAMS

Goal 1

Preservation and protection of the unique biological resources in the City and planning area.

Goal 2

A functional, productive, harmonious and balanced relationship between the built and natural environment.

Policy 1
The City shall continue to participate in the preservation of habitat for endangered, threatened and sensitive species.

Program 1.A
Through the Coachella Valley Association of Governments, maintain an accurate and regularly updated map on sensitive plant and animal species and habitat in Cathedral City and its planning area.
Responsible Agency: Planning Department
Schedule: Continuous

Program 1.B
The City shall take part in the development of the Coachella Valley Multi-Species Habitat Conservation Plan, and shall take particular interest in habitat located in the northern planning area and in the Santa Rosa Mountains adjacent to the City.
Responsible Agency: Planning Department, CVAG
Schedule: Ongoing

Program 1.C
City staff will continue to request biological resource surveys for new development in compliance with applicable state and federal requirements.
Responsible Agency: Planning Department
Schedule: Continuous

Program 1.D
When considering development proposals near the Willow Hole-Edom Hill Preserve, the City will require developers to consider the impacts of their project on wind-blown sand, and encourage creative design techniques, such as units clustering and open space areas, in project design.
Responsible Agency: Planning Department
Schedule: Continuous

Policy 2
As part of the development review process, projects shall be evaluated for the project's impacts on existing habitat and wildlife, and for the land's value as viable open space.

Program 2.A
The City shall participate in the interim project review process established during preparation of the Coachella Valley Multi-Species Habitat Conservation Plan (MSHCP).
Responsible Agency: Planning Department
Schedule: Until completion of the MSHCP

Program 2.B
The City shall encourage developers to recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat and serve to extend the local desert environment into the urban design of the City.
Responsible Agency: Planning Department
Schedule: Continuous

Program 2.C
The City shall distribute a listing of planting materials which emphasizes native vegetation, but may also include non-native, plants which are compatible with the local desert.
Responsible Agency: Planning Department
Schedule: 2002-2003

Policy 3
Encourage and cooperate with other agencies in establishing multiple use corridors that take advantage of drainage channels and utility easements as wildlife corridors, public access and links between open space areas and the built environment.

Program 3.A
Consult and coordinate with relevant public and quasi-public agencies, including Riverside County Flood Control and Southern California Edison, to encourage the establishment of a system of multiple use wildlife and public access corridors.
Responsible Agency: Planning Department; Riverside County Flood Control; Southern California Edison
Schedule: 2002-2003, Ongoing

Policy 4
Assure that sensitive habitat and wildlife areas, as well as state and federal lands, are appropriately buffered from the built environment.

Program 4.A
The General Plan Land Use, Circulation and Open Space and Conservation Element shall recognize, reflect and provide an effective buffer between urban land use and development and valuable and sensitive habitats and natural communities within the Santa Rosa Mountains, the Edom Hill-Willow Hole Preserve, and other open space and conservation lands.
Responsible Agency: Planning Department; Planning Commission; City Council
Schedule: Continuous

Policy 5
Promote the protection of biodiversity and proactively encourage an appreciation for the natural environment and biological resources.

Program 5.A
Encourage the Palm Springs Unified School District and other organizations such as The Living Desert, to provide educational programs which offer an understanding of the region's natural environment and make the public aware of biological resource issues.
Responsible Agency: Planning Department
Schedule: Ongoing

ARCHAEOLOGICAL AND HISTORIC RESOURCES ELEMENT

PURPOSE

The purpose of the Archaeological and Historic Resources Element is to set forth goals, policies, and programs intended to preserve the cultural heritage and historic traditions of the City of Cathedral City and its vicinity. It provides the basis for the identification and preservation of these valuable resources. The Element also references other information sources that provide detailed descriptions and evaluations of archaeological and historic resources within the General Plan planning area.

For the purpose of this element, archaeological and historic resources are divided into three separate discussions, prehistoric, historic and locally significant. These divisions are based on time periods, and the differing cultures and events of those times. While they represent different components of the City's history, they all are equally important to the preservation of the City's and Valley's unique heritage.

BACKGROUND

The Archaeological and Historic Resources Element is directly related to several other General Plan elements, including Biological Resources, Land Use, and Open Space and Conservation. It may also influence the Community Image and Urban Design Element.

The issues addressed in the Archaeological and Historic Resources Element are some of those identified in subdivision (b) of California Government Code Section 65560 and Public Resources Code Section 5076. The California Environmental Quality Act (CEQA), Section 21083.2(g), also requires the City to document, or cause to be documented, cultural resources when the potential for significant resources exists. The General Plan EIR contains a detailed discussion of prehistoric and historic settlement in the Coachella Valley, as well as identification of significant sites and features. The EIR also addresses potential impacts resulting from implementation of the General Plan.

Cultural traditions and artifacts serve as important links between the past, present, and future. They are an integral part of community life and provide a meaningful sense of heritage and history. Numerous archaeological sites, established by Cahuilla Indians as early as 1500 years ago, have been identified throughout the Coachella Valley. The region also contains important historic features, including roads and trails, which were used by early European settlers beginning in the late eighteenth century.

Eight structures in the planning area are listed in the California Office of Historic Preservation's Historic Property File for Riverside County. They were established during the early 1900's, as Cathedral City was beginning to define itself as a resort and residential community.

Prehistoric Times

The prehistoric period refers to the time prior to the arrival of non-Indians, when native lifestyles and traditions remained essentially undisturbed, strong and viable. The prehistoric period in the Coachella Valley is generally divided into the Late Prehistoric and Archaic Periods. The transition between these two periods is generally considered to be around AD 1000, and is identified by the introduction of ceramics into the region from the Colorado River cultures. For this reason, the Archaic Period is generally referred to as the "pre-ceramic" period. Also significant during prehistoric times was the introduction of the bow and arrow, approximately around AD 500, and the change from burial practices to cremations, around 500 BC.

The Cahuilla

The Cahuilla people were the first known inhabitants that settled in the Coachella Valley. According to archaeologists, the Cahuilla came from the north approximately 2,000 to 3,000 years ago. They are thought to have migrated south from the Great Basin region of Nevada, Utah, and eastern California. The descent of these native peoples has been derived from linguistic relationships, which has offered traces of their ancestral past. The Cahuilla belong to the Uto-Aztecan language family, and are a Takic speaking people. Other people that belonged to the Takic group are the Serrano, Luiseño, and Gabrieliño people, who are located within the surrounding regions of southern California.

The Cahuilla are generally divided into three groups by anthropologists, according to their geographic locations in the region; the Pass Cahuilla of the San Gorgonio Pass/Palm Springs area; the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains and the Desert Cahuilla of the eastern Coachella Valley. All three groups spoke the Cahuilla language, had similar lifestyles and practiced the same traditions. The following discussion provides general information on their environment, way of life and society, as well as historical and present day information.

The Cahuilla and Their Environment

The range of the Cahuilla people today is in the same general location within the Coachella Valley that was inhabited by their ancestors 2,000 to 3,000 years ago. The Coachella Valley provided the people tall mountains, deep valleys, rocky canyons, passes and arid desert land for sustenance, shelter and places to escape the heat or the cold. Many of the Desert Cahuilla lived around ancient Lake Cahuilla, which was located where the Salton Sea is today, and at times extended as far north as the City of La Quinta. Remains indicate that these people ate fish, shellfish, water plants and birds as well as land animals and plants. However, when the lake dried out around AD 1500, these people had to rely more heavily on the nearby hills and mountains for water, food and shelter.

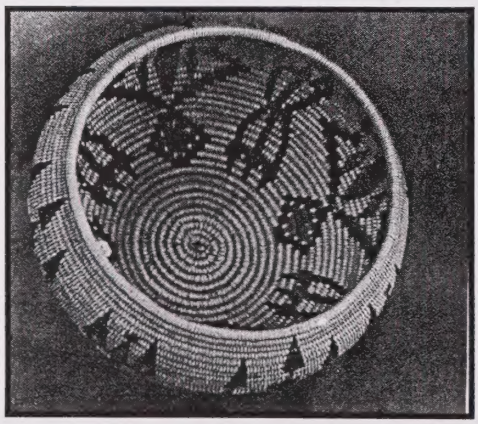
Plants were very valuable to the Cahuilla, as they provided the majority of materials necessary for shelter, clothing, and tools, as well as the majority of the people's food. The most important Cahuilla food plant was the mesquite tree, which offered blossoms and beans for sustenance.

Dried bean pods would be gound into a meal for cake or gruel, while the ripened pods were crushed and made into a beverage. The Cahuilla also used over sixty different plants in their diet, including cacti, agave, yucca, fan palm trees, pinyon trees and other seed or fruit producing plants. In more recent times, the Cahuilla also grew crops of corn, squash, beans and melons, which they acquired from the tribes of the Colorado River.

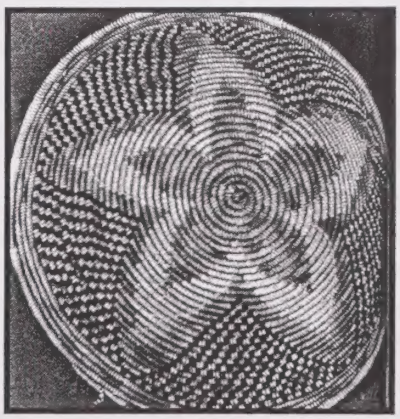
Although there was a great deal of emphasis on plant foods, many animals were also hunted and trapped for food and other raw materials. Large game animals, including mule deer, mountain sheep and pronghorn were favored because of the quantity of food and materials that could be collected from them,. While they were hunted throughout the year, they were often hard and dangerous to kill. For that reason, small game animals including squirrels, rabbits and mice provided the bulk of the meat protein in the Cahuilla diet, because of their large numbers and ease of capture. In addition to food, the large and small game also provided hides and fur for blankets and clothes, as well as bones for tools and utensils.

Settlements and Manufactures

Cahuilla settlements usually were clustered around hand dug wells and water holes, and many were near streams that flowed from canyons at the base of the San Jacinto and Santa Rosa Mountains. Communities were permanent as long as water supplies lasted. Cahuilla dwellings consisted of substantial rectangular structures with forked mesquite posts that held roof beams. Along the sides and on the beam tops were arranged lengths of palm fronds and brush, which were held in place by horizontal poles fastened to the thatches. On some houses the brush was smeared with a coat of mud, and a layer of dirt was added to the roof. At the front of the house was a porch, which was constructed like a house but walled only on the windward side. Settlements also included a bathhouse that was framed with posts and poles, and built into a shallow pit. The social and ceremonial leader occupied the dance house, which was forty feet in diameter with walls of fitted boards and a palm-thatched roof. At the back of the house was a room where the sacred bundle was kept, and at the front of the structure was a fenced enclosure.



An aboriginal house stayed relatively cool even in the hottest weather, the inside staying dark, with natural light filtered in only through the doorway. Toward the center of the structure was a fireplace that was encircled by cooking pots. At the back of the house, blankets and animal skins served as mattresses. Attached to the roof beams were bundles of plants or dried meat for future use. Most artifacts around a settlement were made from plant fibers. Baskets of varied sizes and shapes were fashioned for use as utensils and food storage containers. Inside the settlements were grinding stones, which consisted of a concave stone called metate and a smaller, hand held stone called a mano.



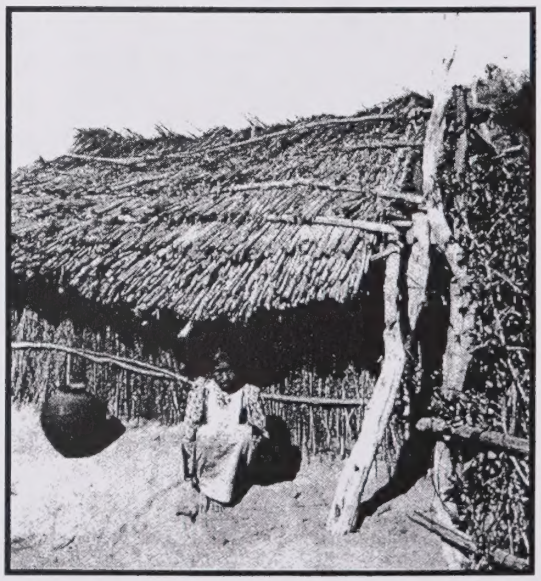
Cahuilla Indian Baskets

Social Structure and Organization
The broadest level of social identification and organization for the Cahuilla was the overall group of persons speaking the Cahuilla language and recognizing a commonly shared cultural heritage. However, there is no indication that the Cahuilla as a whole united for any activity as a single unit prior to European contact, but some organization did take place shortly after that time. The Cahuilla culture was seen as distinct from other Takic speaking people, and cultural nationality was determined by birth, language and socialization.

The next level of organization was the moiety, which was a social entity that had more precise definitions of membership. The Cahuilla were divided into two moieties, the wildcats (*Mukat*) and the coyotes (*Tamaioit)*, which were important entities of Cahuilla mythology. Every Cahuilla was a member of his or her father's moiety. The function of this division of social organization was to regulate marriage and ritual reciprocity and continuity. The members of one moiety could only marry a member of the opposite moiety. The moieties also served an economic and ceremonial function at most Cahuilla rituals, at which inter-moiety cooperation was mandatory.

The 'sib' is the next unit of organization, and was composed of a number of lineages, varying from three to ten. Each group was named and claimed a common ancestor to which all others were related to varying degrees. The sib was a political unit, an economic-corporate unit, and a ceremonial unit. The leader (*net*) of a sib directed subsistence activities, was the mediator in intra-sib disputes, and was responsible for the correct performance of ceremonies. The sib also united for the protection of its resources; when large communal hunting activities were undertaken; or at times of impending or real disaster (floods, droughts or earthquakes).

The social organization of the Cahuilla had many adaptive and advantageous functions. The moiety principle set up a reciprocal social system. It regulated marriage, requiring that each Cahuilla lineage exchange women with another lineage of the opposite moiety. This helped to ensure the expansion of economic and political alliances to several other groups. The lineage principle defined group membership and food-producing areas. The delineation of the groups within geographical areas minimized the possibility of conflict over food resources, and guaranteed that food-producing areas were exclusively available to particular groups of people.



Cahuilla Indian Structure

Historic Changes in Cahuilla Life
The first Europeans to meet the Cahuillas were a group of Spaniards who came to the territory in the company of Indians from Mexico, under the direction of Juan Bautista de Anza. In 1774, Anza and his men set out to look for a good, easily passable land route between the state of Sonora in Mexico and the Monterey Peninsula of California, where one of the earliest missions was established. However, because the Valley was inland and isolated from Spanish

outposts, the Cahuilla at first had little contact with the Spanish soldiers, priests and civilians. However, in the early 1800s, the Cahuilla began to hear more about mission life, and many began visiting them and returning with new material goods. By 1819, several missions were established, including those near San Bernardino, Santa Ysabel and Pala, and many Cahuilla were learning to speak Spanish. In addition, the Cahuilla were learning European farming techniques, raising cattle and using horses for farming, herding and transportation. Although the Cahuilla were acquiring new skills and abilities from the Spanish, they used them only to supplement their traditional practices. Despite all the changes that were brought by the Spanish, the Cahuilla remained economically and politically independent.

In 1822, the Mexicans succeeded in driving the Spanish forces out of Mexico and California. This change in power also brought change to the inland area. Mexicans began exploiting land for agriculture and ranching, including Cahuilla land. Many of the Cahuillas began working as skilled laborers on the ranches, and the Mexicans relied on them for ranch labor and management. By 1848, the United States had gained control over California, and was taking up much of the land. In the same year, gold was discovered and Americans began passing through the area in increasing numbers on their way to the gold fields. They also began taking choice hunting and food gathering lands, away from the Cahuillas. By the 1850s, the relationship between the Cahuilla and the non-Indians had become tense. The non-Indians viewed Cahuilla territory as desirable land, and conflicts arose over who had the right to own and use the land. In 1862 and 1863 a small pox epidemic killed many Cahuilla. The Cahuilla population, which had been as high as 6,000 to 10,000, was diminished to only 2,500. The Cahuilla could no longer make a strong stand against outsiders, whose populations in the area were growing rapidly.

In the late 1870s the first reservations were established for the Cahuilla people. These included the Cahuilla, Torres-Martinez, Cabazon and Morongo reservations. However, land on these reservations was not very well protected by the law, and many settlers continued to use Indian land for themselves. Therefore in 1891, the Mission Indian Relief Act was enacted, which formally established reservation land for the Indians of southern California. For Indians in and around the Palm Springs and Cathedral City area, the act set aside 32,000 acres for reservation land in a checkerboard pattern. While setting up reservations and defining boundaries, the Act actually took land away from the Cahuilla. After the reservation act went into effect, the Cahuillas were left with two-thirds of the land they had controlled prior to 1891. Reservation life also changed Cahuilla traditions, more so than their first contact with the Spanish and the Mexicans had. Traditional hunting and harvesting techniques were no longer sufficient to feed people. Instead, Cahuillas became more reliant on farming, cattle ranching, land rentals, wage labor and employment on the reservations.

Cahuilla Life in Present Times

Conflicts over land rights continued into more recent times. However, as more laws were enacted the Cahuilla were able to adapt more efficiently to the changing times. In 1959 two bills passed that helped to provide the Cahuillas with more economic stability. The equalization bill allotted land to all tribe members who had not receive land allotments, and ensured that the allotments were to be based on 1957-1958 appraised land values. The second bill provided that reservation lands could be leased for a period not exceeding ninety-nine years. The first large enterprise on leased land was the Palm Springs Spa Hotel complex. The spa was completed in 1960 at a cost

of $1.8 million. In the 1970s, a court decision found that Indians have control over the zoning of their lands within a city. As a result, the City of Palm Springs and local Indian planning commissions began to work together for mutual benefit. Similar arrangements have been negotiated with both Cathedral City and Rancho Mirage.

In recent times, the Cahuilla have turned increasingly toward an emphasis on their heritage. Cahuilla work as consultants to cultural anthropologists and on archaeology field crews. Efforts are also being undertaken to preserve the Cahuilla language and other traditional aspects of their culture. Consequently, the Agua Caliente Band have opened a museum that teaches about the traditional lifestyles and practices of their ancestors, establishes a sense of roots for modern day Cahuilla, and helps to revitalize their heritage.

Prehistoric Resources in the Planning Area

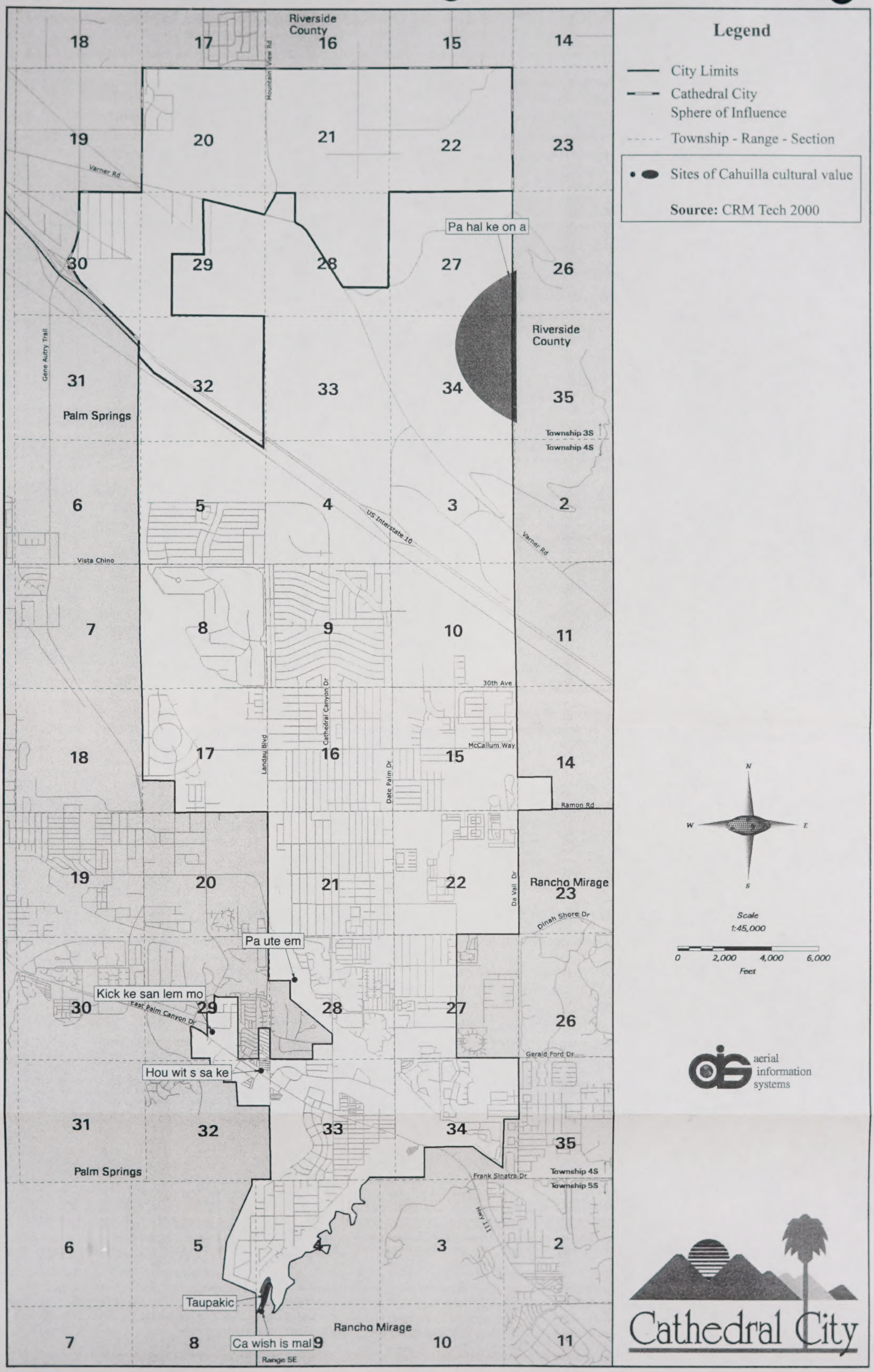
Several research methods were utilized to help identify archaeological resources in the planning area. A records search was conducted at the Eastern Information Center (EIC), University of California, Riverside. The EIC maintains records and maps of previously recorded archaeological resources. For information on possible sites of Cahuilla traditional cultural value, research was also done in the current scholarship on Cahuilla culture and history. A field reconnaissance was also conducted to inspect the current conditions of previously recorded properties.

According to the EIC, the Cathedral City area has not been extensively surveyed for cultural resources. In all, less than one-third of the planning area has been covered by project-related studies. The majority of the studies took place in the northern portion of the planning area on the valley floor and in Indio Hills. In the southern portions of the planning area, several relatively small-scale studies have taken place around Cathedral City's urban core and no archaeological sites were recorded.

In the planning area, only one prehistoric site has been recorded into the California Historical Resource Information System. This site consists of a rock ring feature. Members of the Coachella Valley Archaeological Society report the presence of another prehistoric site in the vicinity of Willow Hole, but the site has never been recorded. There are however, six locations within, or in close proximity to the planning area that have been identified by Cahuilla cultural authorities to be of potential cultural significance. Four of the six are found along the foot of the San Jacinto Mountains, near the southern end of the planning area, while the fifth is situated in the Whitewater River bed in the same general vicinity. All five of these locations are associated with the various streams or canyons where water sources were available. The sixth location is situated in the Edom Hill area, in the northwestern portion of the planning area. None of the six sites are located on the valley floor. The six locations of cultural value are listed in the table below. Sites are shown in Exhibit IV-8.

Table IV-2
Sites of Cahuilla Cultural Value in the Planning Area

Name	Location	Remarks
Ca wish is mal	In Cathedral Canyon	"Painted rock," named by Cahuilla cultural hero *Evon ga net*
Hou wit s sa ke	Near the mouth of Eagle Canyon	"a bear-skin blanket," named by *Ca wis ke on ca,* a legendary Cahuilla leader
Kick ke san lem mo	Convergence of Palm Canyon Wash and Tahquitz Creek	"The place where the white flowers grow," named by *Ca wis ke on ca*
Pa hal ke on a	Edom Hill	Named by *Ca wis ke on ca*
Pa ute em	Whitewater Wash	Named by *Evon ga net* at the "ground squirrel's home"
Taupakic	Cathedral Canyon	Named by *Hiwinut,* the legendary "great *net* (chief)," "where they gathered the mescal"



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General Plan
Cahuilla Cultural Sites

Exhibit
IV-8

Given the above findings, certain locations within the planning area are regarded as highly sensitive for prehistoric and archaeological sites. The foothills and canyons area along the base of the Santa Rosa Mountains, and the mesquite dunes between Seven Palms Valley and Edom Hill are highly sensitive for prehistoric archaeological resources. The balance of the planning area on the valley floor, in contrast, contains a low sensitivity for prehistoric archaeological resources (see also Exhibit IV-9).

Historic Period

The Historic Period in the Coachella Valley refers to the period of time of the first European contact, which is around the late 1770's. This period ends about the time of World War II, and therefore historic resources generally refer to significant sites that are more than forty-five years of age. Historic resources and sites generally consist of structures or buildings, permanent trails or highways.

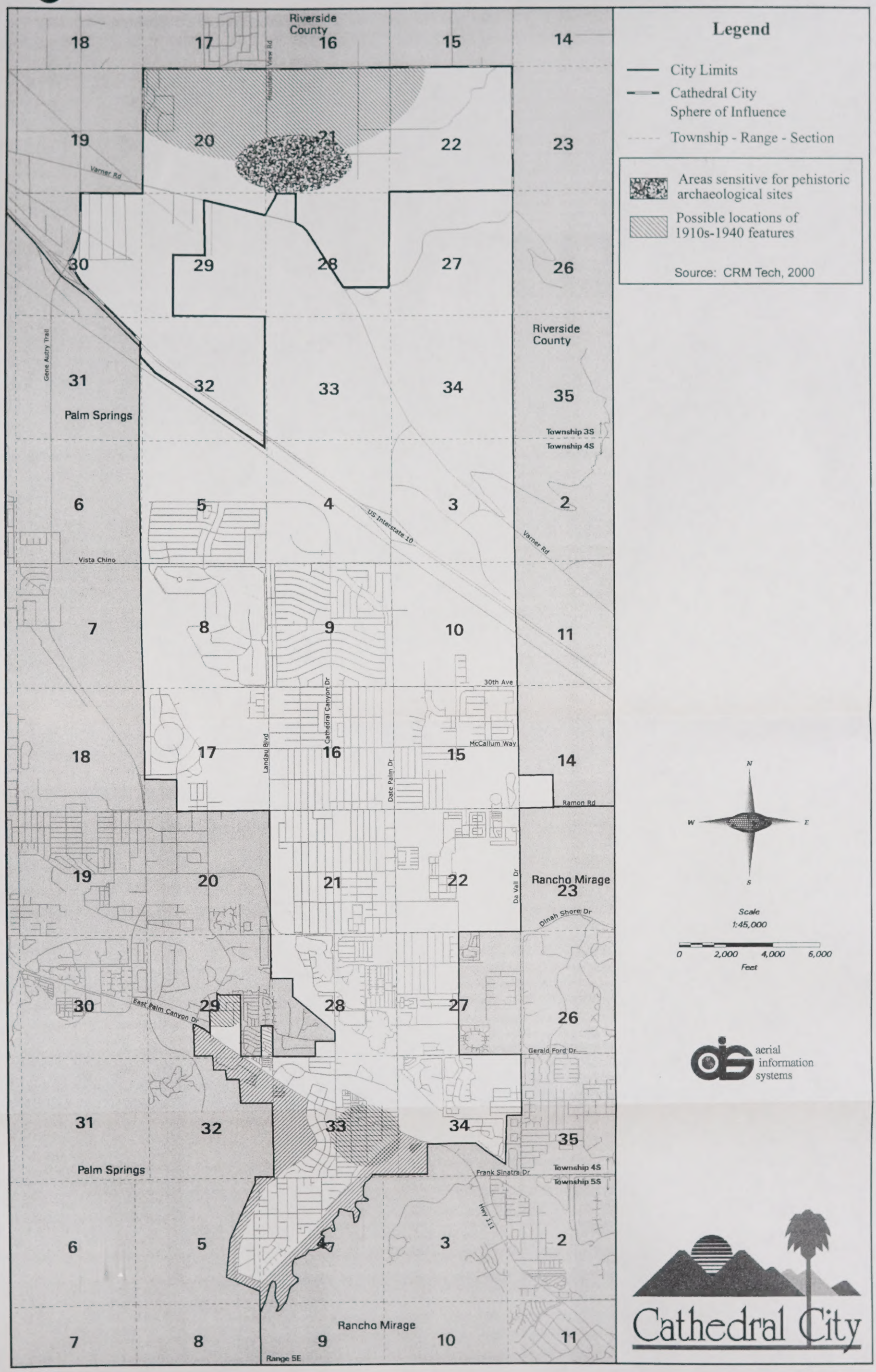
History of the Coachella Valley

The primary route through the Coachella Valley was a trading route, known as the Cocomaricopa Trail, which connected the coast to the Colorado River. The route, originally used by the native peoples of the area, was used by early European explorers as early as 1815. In 1862, the Trail was rediscovered by William Bradshaw, and became known as the Bradshaw Trail. It became the primary access between the Los Angeles basin and gold mines in Arizona, until the completion of the Southern Pacific Railroad in 1877. The Bradshaw Trail was once again used in the early 20th Century, to create a portion of the "Ocean to Ocean" highway. In the Coachella Valley, Highway 111 today closely follows the Bradshaw Trail, known as East Palm Canyon Drive in Cathedral City.

The Southern Pacific Railroad brought non-Indian settlement in the Coachella Valley in the 1870s, when stations were established, and spread further in the 1880s, after public land was opened for claim under the Homestead Act, the Desert Land Act, and other federal land laws. Traditionally, farming was the dominant economic basis in the valley, thanks in part to the development of groundwater resources. In particular, the completion of the Coachella Canal in 1948-1949, provided an adequate and reliable water supply. The main agricultural staple in the Coachella Valley was the date palm, which was first introduced around the turn of the century. By the late 1910s, the date palm industry had firmly established itself. Starting in the 1920s, the Coachella Valley developed a new industry that consisted of equestrian camps, resort hotels, and eventually country clubs. This industry gradually spread throughout the Valley, transforming the area to a very popular winter retreat.

Historic Resources in the Planning Area

In the early 1980s, the Riverside County Historical Commission commissioned a countywide historical resources reconnaissance, which led to the recordation of eight historic-era buildings within the planning area. All of these were located in Cathedral City's old downtown area, and their construction dates ranged between the mid-1920s and the late 1930s.



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General Plan
Potentially Sensitive Areas for Cultural Resources

Exhibit
IV-9

Another historic building, located in the northern portion of the planning area has been added to the California Historical Resource Information System since the original survey. It was a 1930s highway service station on Varner Road, formerly a part of the original Ocean-to-Ocean Highway. The site was reported to be in ruins at the time of its recordation. A field survey performed in 2001 found that the majority of the buildings recorded during the 1980s survey have been removed. All of the recorded historical sites are listed in the table below.

Table IV-3
Recorded Historic-Era Buildings in the Planning Area

Property Number	Property Name	Location	Property Type	Year Built
33-5627	Senior Citizen Center*	68-715 A Street	Community Center	1939
33-5628	None	68-537 B Street	Single-family dwelling	1925
33-5629	Desert Exteriors*	68-821 B Street	Residential/commercial	1930s
33-5630	None	37-236 Cathedral Canyon Drive	Single-family dwelling	1920s
33-5631	None**	68-773 D Street	Single-family dwelling	1930s
33-5632	None*	68-918 Dawes Street	Single-family dwelling	1931
33-5633	None*	68-681 Grover Street	Single-family dwelling	1930s
33-5634	Bargain Center*	68902 Highway 111	Commercial building	1920s
33-6885	Ruins of "Old Stone	Varner Road, east of Mountain View Road	Commercial building	1930s

*These buildings are no longer present today
** This building has been significantly altered

Locally Significant Resources

Because the City of Cathedral City is a relatively new community, the number of historical resources is limited. However, the City does have some sites which are considered locally significant, and worthy of protection. These sites are generally those that contribute to the City's image, culture and integrity. This section focuses on local history and the development and founding of Cathedral City.

The Founding of the City of Cathedral City

The City of Cathedral City was founded in 1925 by four developers, John Grove, George Allen, Glenn Plumley and M.V. Van Fleet, whose names were given to some of the original streets in the subdivison they created. The name of the town was derived from nearby Cathedral Canyon, which had been known by that name since at least the turn of the century. Created to provide affordable low-to moderate-income housing, the town was characterized by its narrow streets lined by small and often odd-shaped lots, and became known as the "blue-collar neighbor" of Palm Springs.

With the upgrading of present-day Highway 111 in 1927, several motels and restaurants were constructed along the newly paved state highway. At that time the highway was known locally as Broadway, and it formed the core of Cathedral City's downtown commercial district. During the

1930s, the Cathedral City attracted Palm Springs visitors with the opening of two prominent gambling casinos, the Dune Club and 139 Club.

The 1940s and the early 1950s marked a period of relatively rapid growth for Cathedral City. During World War II, the town served as a bedroom community to the military installations established in the vicinity as a part of the war effort. By the mid-1950s, residential development had expanded from the original townsite southward into the cove area, westward along Highway 111, and northward to the Ramon Road corridor. The rural northern portion of the planning area also saw significant growth in the early and mid-1950s. In this area, five-acre parcels were patented by the U.S. government, under the so-called "Baby Homestead Act," to residents of the Los Angeles basin who were looking for weekend retreats in southern California's desert.

During the post-WWII era, Cathedral City and the other cities along Highway 111 became the fastest growing communities in the Coachella Valley, and began to play an increasingly important role in the regional economy. In 1981, Cathedral City was incorporated as the 18th city in Riverside County. With a population over 42,000, it is currently (2001) the third largest city in the Coachella Valley.

Areas of Sensitivity for Historic Resources

Although the locations identified in Table IV-3 have been in many cases either lost or altered, certain areas of the City can be considered sensitive for historic resources, parts of the City still contain buildings dating back from the 1910s through the 1950s. These include the downtown area, in the lettered streets; the Cree Road/Palm Valley School Road neighborhood, on the north side of East Palm Canyon, at the western City limit; the area along 20th Avenue, in the northern end of the planning area, which was used for ranching; and the Cove neighborhood and the flatlands at Edom Hill and Flat top Mountain, which may contain 1950s era structures. Although none of these areas contain sufficient coherent historic significance to be designated a historic district, individual structures may prove to have significance. Exhibit IV-9 shows sensitivity areas for historic cultural resources.

Historic Preservation Programs

Federal Programs

The National Park Service and the State Historic Preservation Officers (SHPO) of each state administer the Certified Local Government (CLG) program, which allows local governments to take a much more active role in historic and prehistoric preservation efforts in their communities. Local governments must meet certain requirements to qualify as a CLG, including local ordinances which establish systems and standards for the preservation of resources. CLGs can also take advantage of technical assistance, professional assistance, and other state-wide programs.

The National Register of Historic Places is maintained by the Secretary of the Interior. It provides a national inventory of districts, sites, buildings, structures, objects and other features of national, state or local significance. Properties eligible for listing must meet certain pre-defined criteria. There are no properties within the planning area currently listed on the National Register.

A number of other federal statutes provide programs for the preservation of historic and prehistoric resources, including tax credits for the certified rehabilitation of historic buildings, Community Development Block Grants, and the historic building reservation program which is part of the Transportation Equity Act of 1998.

State Programs
The State Office of Historic Preservation manages California's CLG program, as described above, and provides a number of services to participating local governments. In addition, the state established the California Register of Historical Resources in 1992, which is California's equivalent to the National Register. Two other registers are managed by the Office of Historic Preservation – the California Historical Landmarks register, which identifies properties of statewide historic importance; and the Points of Historical Interest register, which inventories properties of regional importance. Properties which are listed on these registers are eligible for property tax reductions, benefits provided by the California Heritage Fund, alternative building regulations under the Historic Building Code, seismic retrofit tax credits, and historic preservation bond measures. There are no properties in Cathedral City on either register at this time.

FUTURE DIRECTIONS

The lack of identified and recorded resources in Cathedral City does not mean that the City is devoid of these resources. The City's modest beginnings may not have resulted in the high profile development of resort hotels and "movie star hangouts" which have been well documented elsewhere in the Valley, but the City's history is no less significant. Structures and properties within the City may bear preserving, and must be identified early in the development process.

The City of Cathedral City has a rich and interesting history that provides a meaningful sense of heritage to residents and visitors. As the city continues to grow and develop, every effort should be made to identify and preserve the artifacts, places and resources, which have a relation to the City's history. Although many historic structures have already been lost, the City should search for ways to revitalize its past. Furthermore, many present day structures, resources and traditions play a role in the City's cultural values. These resources should be identified and preserved as well for their importance to the City.

GOAL, POLICIES, AND PROGRAMS

Goal

Identification, preservation, and revitalization of significant cultural, historical and archaeological resources that are valuable to the City of Cathedral City's heritage.

Policy 1
The City will ensure that sites in archaeologically and historically sensitive areas are surveyed prior to development.

Program 1.A
Develop and maintain a database of archaeological and historic resources, incorporating information from the Eastern Information Center (EIC) at the University of California-Riverside, General Land Office Survey, site surveys conducted in the planning area, and other data sources.
Responsible Agency: Planning Department; Cathedral City Historical Society
Schedule: 2003-2004

Program 1.B
City staff shall require, early in the project review process, the preparation of focused cultural resource surveys in areas of known sensitivity.
Responsible Agency: Planning Department
Schedule: Ongoing

Program 1.C
The City shall adopt specific standards for the identification, preservation and maintenance of archaeological and historic sites. These standards shall include professional qualifications for persons performing site-specific surveys.
Responsible Agency: Planning Department
Schedule: 2002-2003

Program 1.D
As part of the development review process, the City shall transmit development applications to the Eastern Information Center for comment.
Responsible Agency: Planning Department
Schedule: Ongoing

Program 1.E
In the event that archaeological resources are identified during construction, the City shall require that development cease, and a professional archaeologist shall be employed to examine and document the site to determine subsequent actions.
Responsible Agency: Planning Department
Schedule: Ongoing

Policy 2
The City shall make every effort to protect sensitive archaeological and historic resources from vandalism and illegal collection.

Program 2.A
Mapping and site-specific information shall be kept confidential, and access shall be given only to those with appropriate professional credentials.
Responsible Agency: Planning Department
Schedule: Ongoing

Program 2.B
The preservation of sensitive sites or artifacts in-situ should be considered whenever feasible.
Responsible Agency: Planning Department
Schedule: Ongoing

Policy 3
The City shall encourage the Cathedral City Historical Society to establish a program to qualify and list locally significant resources on available state and federal registers.

Program 3.A
The City and Historical Society shall cooperate to complete a city-wide cultural resource inventory to include both prehistoric and historic resources.
Responsible Agency: Planning Department; Cathedral City Historical Society
Schedule: 2002-2003

Program 3.B
The City will consider participating in the Certified Local Government program in order to secure better local control over the management of cultural resources.
Responsible Agency: Planning Department; City Council
Schedule: 2003-2004

Policy 4
Encourage public participation and appreciation of archaeological and historic resources.

Program 4.A
Continue to coordinate and cooperate with the Agua Caliente Band of Cahuilla Indians in the identification and preservation of sensitive Cahuilla Indian sites and resources, and the continued expansion of the tribal Cultural Museum.
Responsible Agency: Planning Department
Schedule: Ongoing

Policy 5
Consider offering economic incentives, such as low-interest loans from all possible sources, and application/permitting fee reductions or waivers, to property owners to encourage the maintenance of significant historical and cultural buildings and sites.

Program 5.A
Provide property owners with information and guidance on property rehabilitation measures and financing alternatives.
Responsible Agency: Planning Department; Redevelopment Agency
Schedule: Ongoing

WATER RESOURCES ELEMENT

PURPOSE

The purpose of the Water Resources Element is to address issues pertaining to water quantity, quality and availability for current and future City needs. An important aspect of this element is the coordination and cooperation between the City, Coachella Valley Water District, Desert Water Agency and other agencies responsible for supplying water to the area. The element also addresses water consumption trends in the Coachella Valley, groundwater recharge, recycled water and wastewater treatment, and their increasingly important roles in groundwater management. The goals, policies and programs set forth in this element direct City staff and officials in the management of this essential resource.

BACKGROUND

This element is directly related to the Flooding and Hydrology Element, as both address the protection and recharge of groundwater resources; and to the Land Use Element, which potentially directly affects the need for water in the City. Water resource issues are also important components of the Emergency Preparedness, Community Design, Economic Development and Water, Sewer and Utilities Elements of this General Plan.

The Water Resources Element incorporates the requirements of California Government Code Section 65302(d). Also, the Element implements Section 21083.2(g) of the California Environmental Quality Act (CEQA), which empowers the community to require that adequate research and documentation be conducted when the potential for significant impacts to water and other important resources exists.

DOMESTIC WATER RESOURCES

Native Americans in the Coachella Valley were restricted to the direct use and diversion of streams in mountain canyons, the digging of wells to intercept underground aquifers in Indian Wells, and the exploitation of artesian wells along the Banning and Mission Creek Branches of the San Andreas Fault system near Desert Hot Springs for their water.

It was not until the twentieth century that the enormous extent of the groundwater basin underlying the Coachella Valley was recognized. Analysis of groundwater repositories by the U.S. Geological Survey and the California Department of Water Resources has determined that the subsurface aquifer is separated into distinct subbasins, which are further divided into subareas.

The boundaries between these structures are generally defined by fault barriers, constrictions in basin profiles, and the unique hydrologic characteristics of each subbasin or subarea. Underlying sands, gravels and other water-bearing fill have eroded from surrounding mountains into the fault-controlled valley floor. The first 1,000 feet of these eroded materials comprise a storage capacity of more than 39 million acre-feet (one acre-foot equals about 326,000 gallons).

The Desert Water Agency (DWA) and the Coachella Valley Water District (CVWD) are responsible for providing domestic water to the General Plan planning area. Development east and north of the Whitewater River occurs within the service boundaries of CVWD, and development west and south of the river occurs within the service boundaries of DWA. These agencies utilize wells to extract groundwater from the Whitewater River subbasin, which underlies most of the planning area (lands within the Indio Hills and the Santa Rosa Mountains are not underlain by any groundwater basins due to the non-water bearing composition of these mountains).

Whitewater River Subbasin

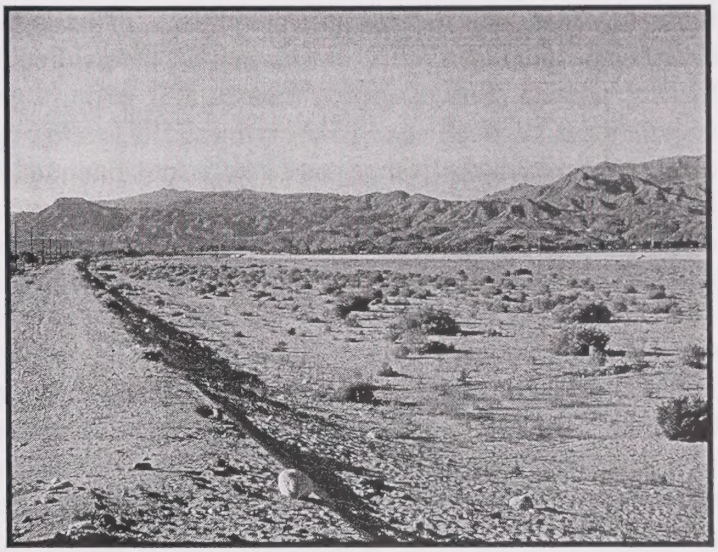
The Whitewater River subbasin is the primary groundwater repository for the Coachella Valley and the City of Cathedral City. Encompassing a major portion of the valley floor, it covers approximately 400 square miles and extends from the junction of Interstate-10 and State Highway 111, to the Salton Sea about 70 miles to the southeast.

The subbasin is divided into four distinct subareas, including the Palm Springs, Thermal, Thousand Palms and Oasis subareas. The Palm Springs subarea underlies most of the City, including lands generally located west of Date Palm Drive. Lands generally east of Date Palm Drive are underlain by the upper Thermal subarea. The northernmost portion of the planning area, including lands north of Interstate-10 and south of the Indio Hills, is underlain by the Thousand Palms subarea. CVWD's Management Area, which includes all the subareas underlying the planning area, has an estimated storage capacity of 11 million acre-feet.

The Palm Springs subarea contains approximately 4.6 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface. The subarea is largely comprised of alluvial fan deposits exceeding 1,000 feet in depth. The subarea is naturally recharged by infiltration of runoff from the San Jacinto Mountains and the Whitewater River, and from subsurface inflow from the San Gorgonio Pass subbasin to the west.

The Thermal subarea extends from eastern Cathedral City, south to the Salton Sea. It contains approximately 19.4 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface, and is characterized by confined or semi-confined groundwater conditions, with free moving water conditions in alluvial fans at the base of the Santa Rosa Mountains. CVWD well logs have identified two aquifer zones in the Thermal subarea. The lower aquifer zone is estimated to be at least 500 feet and possibly more than 1,000 feet thick, and is composed of Ocotillo conglomerate, which consists of gravels and silty sands interbedded with silt and clay. The upper aquifer zone, under which Cathedral City occurs, is similar in composition to the lower aquifer zone, but is not as thick. An aquitard layer, composed of fine-grained materials that slow the vertical flow of groundwater, separates the upper and lower aquifer zones and is estimated to be between 100 and 200 feet thick throughout much of the Thermal subarea.

Whitewater River Channel at Landau and Ramon Road



The Thousand Palms subarea contains approximately 1.8 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface. It extends along the southerly edge of the Indio Hills and is small in comparison to the Thermal subarea. Its southwesterly boundary has been determined based on its distinctive groundwater chemical characteristics. Water in the Thousand Palms subarea is characterized by high concentrations of sodium sulfate, while water in other subareas of the Whitewater River subbasin is generally characterized by calcium bicarbonate. This is largely attributed to limited recharge to the Thousand Palms subarea. The subarea is recharged by limited runoff from the Indio Hills and experiences little, if any, inflow from other subareas or subbasins. Since there is little opportunity for intermixing or "dilution" by water of different chemical compositions, the native sodium sulfate is present in greater concentrations in the Thousand Palms subarea.

Mission Creek Subbasin

In the northern portion of the City and Sphere of Influence, north of Interstate 10, is the Mission Creek subbasin. It extends from the Mission Creek to the Banning Faults on the north and south, and from the San Bernardino Mountains to Edom Hill. Groundwater flows in a southeasterly direction within the basin, which has a storage capacity of about 2.6 million acre feet, and is estimated to have recoverable water in the range of about 1 million acre feet.

Water Demand in the Coachella Valley

CVWD estimates that, within the first 1,000 feet below the ground surface, there are approximately 28.8 million acre-feet of groundwater in storage in the Whitewater River subbasin and about 39.2 million acre-feet in all subbasins underlying the Coachella Valley. Nonetheless, since the expansion of agricultural activities in the early 1900s, and the emergence of the Coachella Valley as a destination resort area with lushly landscaped golf courses and residential communities, depletion of the groundwater in storage has continued steadily.

Continued development in the City and Coachella Valley will result in proportionate increases in the demand for domestic water. CVWD estimates that, of all water "produced" (used) in the valley, 60% is permanently "lost" to consumption, and 40% is reintroduced into the groundwater

table for later use, including a percentage of irrigation water applied to residential and golf course landscaping. CVWD estimates that the per capita water consumption rate in its Coachella Valley service area is approximately 550 gallons per day. This is an aggregate figure that accounts for all water uses in the community, including residential, commercial, industrial, golf course, irrigation and other uses, and is not intended to represent a specific land use. Project-specific consumption rates may be more or less depending on the type and density of development and the extent of water-intensive amenities (such as types of landscaping, fountains and swimming pools) incorporated into each project.

Groundwater pumped from the Upper Coachella Valley (generally extending from Whitewater to Palm Desert) is typically used for domestic purposes and golf course irrigation. Water pumped from the Lower Coachella Valley (generally extending from La Quinta to the Salton Sea) is primarily used for domestic purposes and the irrigation of approximately 72,800 acres of agricultural lands. As described in CVWD's "Coachella Valley Draft Water Management Plan" (November 2000), total water demand in the region increased substantially during the twentieth century, from 96,300 acre-feet per year in 1936 to 668,900 acre-feet per year in 1999. The following table summarizes the major water consumers and demand rates during this period.

Table IV-4
Historical Water Demand in the Coachella Valley
(acre-feet/year)

Consumer	Total Demand Year 1936	Total Demand Year 1999
Crop Irrigation	82,600	332,500
Greenhouses	0	800
Municipal	10,900	202,900
Industrial	0	1,100
Fish Farms	200	21,100
Duck Clubs	1,300	4,300
Golf Courses	1,300	106,200
Total Demand	**96,300**	**668,900**

Source: Table 3-1, "Coachella Valley Draft Water Management Plan," Coachella Valley Water District, November 2000.

Overdraft Conditions

The historical depletion of groundwater in the Coachella Valley has resulted in a condition known as overdraft, in which the demand for groundwater exceeds the amount of recharge into the groundwater basin. CVWD well monitoring data indicate that from the 1950s to 1970s, water levels in the Upper Coachella Valley decreased by approximately 50 to 100 feet. From the 1920s to the 1950s, water levels in the Lower Coachella Valley decreased by approximately 50 feet. They leveled off somewhat after 1949, following the introduction of Colorado River water for irrigation in 1949. However, by the 1980s, water levels in the Lower Valley continued to decline, a trend that continues to the present day. Overdraft can result in significant adverse social, environmental and economic impacts, including the increased potential for land subsidence, increased infrastructure and energy costs associated with drilling deeper wells and installing larger pumps, and the threat of a diminishing long-term water supply.

To determine the extent of overdraft in the Coachella Valley, CVWD has compared the change in freshwater storage in the groundwater subbasins over time. The change in freshwater storage is the difference between inflows and outflows of the basin, excluding inflows of poor quality water from the Salton Sea and irrigation flows that are induced by overdraft conditions.

In 1999, the change in freshwater storage in the Coachella Valley was estimated at 136,700 acre-feet per year. This amount of groundwater was being withdrawn from the basin per year, but was not being replaced. Of this, approximately 32,400 acre-feet were overdrawn from the Upper Coachella Valley, and 104,300 acre-feet were overdrawn from the Lower Coachella Valley. From 1936 to 1999, the cumulative change in freshwater storage was estimated at nearly 4.7 million acre-feet. The table below illustrates the relative imbalance between inflows and outflows in the Coachella Valley.

Table IV-5
Comparison of Historical Inflows and Outflows, 1936-1999
(acre-feet)

Water Balance Component	Total Flows 1936	Total Flows 1999
Inflows		
Natural Recharge	32,600	16,800
Agricultural Returns	37,200	130,700
Domestic Returns	4,300	59,200
Golf Course Returns	500	39,300
Wastewater Percolation	200	16,500
SWP Recharge	0	88,800
Inflows from outside area	12,900	11,500
Inflows from Upper Valley	59,100	29,400
Total Inflows	**146,800**	**392,200**
Outflows		
Groundwater Pumpage	92,400	376,100
Flows to Drains	3,200	55,800
Evapotranspiration	21,100	4,900
Net Flow to Salton Sea	5,300	-400
Outflows to Lower Valley	59,100	29,400
Total Outflows	**181,100**	**465,800**
Annual Change in Storage	-34,300	-73,600
Annual Change in Freshwater Storage	-41,800	-136,700
Cumulative Change in Storage since 1936	-34,300	-1,421,400
Cumulative Change in Freshwater Storage since 1936	-41,800	-4,684,000

Source: Table 3-4, "Coachella Valley Draft Water Management Plan," Coachella Valley Water District, November 2000.

The upper Whitewater River subbasin, in particular, has been characterized by historically significant declining water table conditions. To more effectively manage this area, CVWD and DWA have designated it as a "Management Area" and have carefully monitored its inflow and outflow rates. The Management Area consists of the Palm Springs and Thousand Palms subareas of the Whitewater River subbasin, and that portion of the Thermal subarea experiencing a significantly declining water table. All of these subareas underlie, to some extent, the Cathedral City General Plan planning area. Within the Management Area, overdraft is estimated at 35,621 acre-feet per year, or 0.32% per year.

Primary Water Sources

The principal water source for the Coachella Valley is groundwater, which is naturally recharged by precipitation and runoff from the San Jacinto, Santa Rosa and San Bernardino Mountains.

Surface water from the Whitewater River and the Snow, Falls and Chino Creeks also constitutes an important source of water, although annual supplies are highly variable due to fluctuations in annual precipitation. Other important regional water sources include recycled water from

wastewater treatment plants in the Coachella Valley, and imported Colorado River water, both of which are discussed below.

Groundwater Replenishment

To meet anticipated regional demand for domestic water, CVWD and DWA have contracted for State Water Project (SWP) water to supplement groundwater resources. The agreement entitles CVWD and DWA to supplemental water, which would be transported from northern California to the Coachella Valley via the Coachella Aqueduct. However, due to the extraordinary costs associated with the construction of such a project, the aqueduct has not yet been built.

Until the water delivery system is constructed, CVWD and DWA have entered into an agreement with the Metropolitan Water District of Southern California (MWD). The contract allows CVWD and DWA to exchange their SWP entitlements for like amounts of Colorado River water, which is transported to the Coachella Valley via MWD's Colorado River Aqueduct. The aqueduct passes through the northern portion of the valley, and is tapped where it crosses the Whitewater River. Exchange water is then diverted to a series of spreading ponds near Whitewater, where it percolates to replenish groundwater supplies. A substantial amount of Colorado River water is also transported to the lower valley via the Coachella Branch of the All-American Canal. This represents an important source of water for approximately 72,800 acres of agricultural lands, as well as fish farms, commercial greenhouses, and waterfowl migration ponds.

Since the inception of the artificial recharge program in 1973, more than 1.7 million acre-feet (or approximately 50,000 acre-feet per year) of Colorado River water has been diverted to recharge the Whitewater River subbasin. Temporary halts or severe reductions in recharge waters are necessary when there has been inadequate rainfall or snowfall in the western Sierras.

Despite the addition of recharge waters to the groundwater subbasins, groundwater levels in the Coachella Valley continue to decline. CVWD has sought additional methods of assuring an on-going supply of domestic water, including increasing its Colorado River water entitlements. The Seven Party Agreement of 1931 divides California's share of Colorado River water among seven California agencies, including CVWD. According to the agreement, CVWD and the Imperial Irrigation District (IID), which provides domestic water to other communities in the Coachella Valley, share the third priority for Colorado River water. However, IID has the first option to take as much third party water as it can put to reasonable and beneficial use within its service area. A new tentative agreement, the Quantification Settlement Agreement, has been drafted between CVWD, IID and MWD. It proposes that an average of approximately 456,000 acre-feet per year of Colorado River water be made available to CVWD throughout the 75 year life of the agreement; which would provide CVWD with reasonable assurances of supplemental water. Formal approval of the agreement is pending (2001).

Wastewater Reclamation and Recycling

CVWD and DWA have implemented programs to allow tertiary (third stage) treated wastewater to irrigate golf courses, municipal greenbelts and other landscaped areas. Wastewater typically undergoes two stages of treatment before being released to percolation ponds and being reintroduced into the groundwater table.

Tertiary treated water undergoes a third level of treatment which makes it useable for irrigation of landscaping and golf courses. In the Lower Valley, recycled effluent from fish farms has also been used for agricultural irrigation, bird migration ponds and fish farms.

The Cook Street Wastewater Reclamation Plant, owned and operated by CVWD, which serves development in Cathedral City, is capable of generating tertiary treated water. This plant has a tertiary water capacity of 10 million gallons per day (mgd) and is expected to undergo expansion to 15 mgd within the next few years.

The use of recycled water for irrigation has been effective in reducing the demand for groundwater resources. In 1999, approximately 4% of the water demanded by development in the Upper Coachella Valley consisted of recycled water.

WATER QUALITY

Water quality in the Coachella Valley is generally good to excellent. Exceptions are primarily limited to perched and semi-perched water tables occurring in the lower valley, where on-going crop irrigation has increased total dissolved solids. Groundwater quality can be affected by a number of things, including the type of water-bearing materials in which the water occurs, water depth, proximity to faults, and presence of surface contaminants.

As discussed in CVWD's "Coachella Valley Draft Water Management Plan" (November 2000), historical data indicate that the amount of total dissolved solids (TDS), salts and nitrates have increased throughout the Coachella Valley groundwater basin during the past century. During the 1930s, TDS concentrations in the upper aquifer of the Coachella Valley groundwater basin were typically less than 250 milligrams per liter (mg/L). By the 1970s, TDS concentrations averaged 300 mg/L, and they have risen to a current average of about 540 mg/L.

High TDS concentrations are typically detected near major faults, and have been observed along the San Andreas fault system. In the vicinity of the fault zone separating the Thousand Palms subarea from the Thermal subarea, for example, TDS concentrations have exceeded 1,000 mg/L. However, other evidence indicates that high TDS concentrations may also be associated with the importation of Colorado River water, which is about three times higher in total dissolved solids than natural upper Whitewater River groundwater. The following table illustrates the relative quality of surface water recharging the subbasin, including that imported from the Colorado River.

Table IV-6
Mineral Analysis of Representative Surface Waters

Source	Whitewater River (North)	Snow Creek	Colorado River	Whitewater River (South)
Constituent	epm[1]/ppm[2]	epm/ppm	epm/ppm	epm/ppm
Ca	1.75/35	0.50/10	3.97/79	9.08/181
Mg	0.90/11	0/0	2.31/28	3.74/45
Na	0.62/14	0.47/11	4.78/110	32.58/749
K	0.108/4.2	0.04/1.6	0.11/4.3	0.39/15
Cl	0.1/4	0/0	6.01/213	15.96/566
Total Dissolved Solids	201 ppm	55 ppm	727 ppm	2,983 ppm

Notes: [1] epm = chemical equivalents per million; [2] ppm = parts per million by weight
Source: DWR Bulletin No. 108: Coachella Valley Investigation, California Dept. of Water Resources, July 1964.

Salts have also been added to the groundwater basin through the importation of recharge water, as well as through natural recharge processes, wastewater percolation, the application of fertilizers, and intrusion of the Salton Sea into the groundwater basin. CVWD estimates that the quantity of salts added to the groundwater basin increased from approximately 12,000 tons per year in 1936, to about 265,000 tons per year in 1999. The majority of salts (65%) come from the lower valley, where agriculture predominates. Salt removal can be accomplished via agricultural drains that drain directly into the Salton Sea, and the Coachella Valley Stormwater Channel, which isolates agricultural drainage and fish farm effluent.

Nitrate concentrations in the groundwater basin have also increased over the past century. CVWD data indicates that nitrate concentrations in the Coachella Valley's groundwater increased from less than 4 mg/L in the 1930s, to more than 45 mg/L in wells adjacent to the Whitewater River in the 1970s. According to the California Department of Water Resources, these increases are most likely related to the application of fertilizers on agricultural lands and golf courses, and effluent from septic tanks and wastewater treatment plants.

Other agencies have also acknowledged that septic tanks have the potential to adversely impact groundwater supplies. The greatest impacts to water quality are expected to occur where septic systems serve relatively large populations in high densities, and where these systems are old or poorly maintained. Community sewer systems provide excellent protection for groundwater supplies, as they provide for the swift removal, disposal and treatment of wastewater.

WATER QUALITY LEGISLATION

To assure adequate planning, implementation and enforcement of water quality control efforts, a variety of state and federal legislation has been enacted, including the federal Clean Water Act and the National Environmental Policy Act (NEPA), and California statutes and administrative laws such as the California Water Code, California Environmental Quality Act (CEQA), California Code of Regulations, and other legislation including the Health and Safety Code, Fish and Game Code, and Public Resources Code.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

The California Regional Water Quality Control Board (CRWQCB) is responsible for implementing state and federal laws pertaining to water quality, including enforcing penalties for noncompliance in the control of water quality. In the Coachella Valley, the CRWQCB primarily deals with agricultural drainage, impacts of geothermal power, and concerns about the Salton Sea, Tahquitz Creek and other sources of surface water. It also monitors leaking fuel storage tanks, illegal discharges of human or animal waste, and the inappropriate disposal of hazardous and toxic materials.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

The City of Cathedral City participates in the National Pollutant Discharge Elimination System (NPDES), which implements the federal Clean Water Act. The NPDES mandates the development and implementation of plans and programs for storm water management that effectively prohibit non-storm water discharge into storm drains, and require controls to reduce the discharge of pollutants from storm water systems into waters of the United States. NPDES plans are exempt from the CEQA analysis process. The Clean Water Act also requires that all point sources discharging pollutants directly into waters of the United States obtain an NPDES permit, which specifies limits on what can be discharged, monitoring and reporting requirements, and other provisions that assure discharge does not adversely impact water quality or human health.

WATER CONSERVATION

Water conservation is essential as both a short-term and long-term resource management strategy. One of the best opportunities for municipal water conservation is the use of water-efficient landscaping treatments, including drought-tolerant plant materials and irrigation systems that minimize runoff and evaporation while maximizing watering of plant roots. Fortunately, City residents have shown an appreciation for the native desert environment and the opportunities it provides to reduce the use of water-dependent turf.

The City has incorporated water-conserving landscape and irrigation principles into its Development Design Guidelines. The guidelines require that new landscape plans be designed to incorporate native and locally compatible planting materials, and that large expanses of lawn and grass be avoided. The document refers developers and related parties to the landscaping and irrigation guidelines published by CVWD, and recommends that developers contact CVWD and/or DWA staff for further consultation. The City has also adopted a Street Tree Policy, which identifies a wide range of trees appropriate for the desert environment and requires that trees be irrigated with low-flow, automatically timed irrigation systems designed for water conservation. In accordance with state law, the City also requires the installation of low-flush toilets and low-flow faucets and showerheads in new construction.

To further reduce the impacts of development on groundwater supplies, CVWD and DWA have also adopted a wide range of water conservation programs, including water audits that identify wasteful water usage and provide recommendations for greater efficiency. The agencies provide

public educational programs, workshops and publication, which explain the environmental and economic benefits of water conservation. To demonstrate the appropriate usage of native plants and the most water-efficient irrigation techniques available, CVWD maintains two xeriscape demonstration gardens. Finally, as stated above, the use of reclaimed water for landscaping irrigation also helps to conserve the area's water resource.

FUTURE DIRECTIONS

The wise use and conservation of water resources will continue to be a central theme of community development planning in southern California. Cathedral City plays an important role in the long-term protection of this valuable resource. The city and local water agencies have developed programs intended to increase the use of efficient landscape and irrigation design, water efficient appliances and fixtures, and recycled water. Effective storm water management programs and the protection of local mountain watersheds will also assure preservation of a viable source of groundwater. The City must continue to work closely with neighboring communities and local water purveyors to assure a healthful, long-term supply of water.

GOALS, POLICIES AND PROGRAMS

Goal

A sustainable, long-term supply of clean and healthful domestic water available for existing residents and future growth.

Policy 1
The City shall require the use of water-conserving appliances and fixtures in all new development, as mandated by State law.

Program 1.A
Require the installation and application of water-conserving technologies, in conformance with Section 17921.3 of the Health and Safety Code, Title 20, California Administrative Code Section 1601(b), and other applicable sections of Title 24 of the Public Code.
Responsible Agency: Public Works Department, Planning Department
Schedule: Continuous
Program 1.B
Provide information to developers, contractors, property owners and other appropriate parties on the usage and benefits of water conserving bathroom fixtures.
Responsible Agency: Planning Department, Building Department
Schedule: Continuous

Policy 2
Continue to encourage the use of low water consuming, drought-tolerant landscape plantings as a means of reducing water demand.

Program 2.A
The City shall develop and implement a water conserving landscape ordinance, which requires the use of natural and drought-resistant planting materials and efficient irrigation systems in new development.
Responsible Agency: Planning Department
Schedule: 2003 - 2004

Program 2.B
Coordinate with the Coachella Valley Water District and Desert Water Agency to expand and strengthen educational materials and programs that inform residents of the methods and benefits of water-saving techniques available.
Responsible Agency: Planning Department, Building Department, CVWD, DWA
Schedule: Continuous

Policy 3
Encourage the expanded use of tertiary treated wastewater as a means of reducing impacts of development on groundwater resources.

Program 3.A
Coordinate with CVWD and DWA regarding the continued use and future expansion of recycled and reclaimed wastewater to serve new and existing development projects.
Responsible Agency: Planning Department, Public Works Department, CVWD, DWA
Schedule: Continuous

Policy 4
The City shall require the connection of all new development to the community sewer system.

Policy 5
The City shall require existing development currently connected to septic tanks to connect to the sewer system when it becomes available.

Program 5.A
Coordinate with CVWD and DWA regarding the feasibility and financing of extending sewer facilities to the unsewered areas of the City.
Responsible Agency: City Manager's Office, Public Works, CVWD, DWA, CRWQCB
Schedule: Continuous

Policy 6
The City shall coordinate with other appropriate agencies to minimize the potential for groundwater contamination within and in the vicinity of the city.

Program 6.A
Coordinate with the Coachella Valley Water District, Desert Water Agency, California Regional Water Quality Control Board and other appropriate agencies to share information on potential groundwater contaminating sources, and develop and maintain a system of record and information sharing with these agencies.
Responsible Agency: City Manager's Office, Planning Department, CVWD, DWA, CRWQCB
Schedule: Continuous

Program 6.B
Evaluate all proposed land use and development plans for their potential to create groundwater contamination hazards from point and non-point sources, and confer with other appropriate agencies to assure adequate review.
Responsible Agency: Planning Department, CVWD, DWA, CRWQCB
Schedule: Continuous

Policy 7
Establish and enforce guidelines for the development and maintenance of project-specific, on-site storm water retention/detention facilities in a manner consistent with local and regional drainage plans and community design standards.

AIR QUALITY ELEMENT

PURPOSE

It is the intent of the Air Quality Element to provide background information on the physical and regulatory environment affecting air quality in the City and the region. The element also identifies goals, policies and programs that are meant to balance the City's actions regarding land use, circulation and other civic issues with their potential effects on air quality. This element and local and regional air quality planning efforts are intended to address ambient air quality standards set forth by the federal Environmental Protection Agency (EPA) and the California Air Resources Board (CARB).

BACKGROUND

The Air Quality Element is directly related to the Land Use Element in its association with land use types and intensities. This Element is also related to the number, length, and timing of traffic trips, which are discussed in greater detail in the Circulation Element, as well as the amount of open space planned for preservation in the Open Space and Conservation Element. The Economic Development Element, which addresses the protection of natural resources important to the local economy, is also related to issues of air quality.

Air quality is a major concern in southern California, largely because of the potentially significant health effects and property damage caused by air pollutants. Concerns over air pollution have led to state and federal legislation mandating regional plans to improve air quality. In 1988, the State Legislature enacted Assembly Bill 2595, which became known as the California Clean Air Act (CCAA). The purpose of this action was to protect the future health and welfare of the people of the State of California and protection of the State's environment and economy, regardless of federal government actions or policy directions. The California Air Resources Board has been entrusted as an overseer of the CCAA and advises and evaluates the efforts made by regional air pollution control agencies and districts regarding compliance with the requirements of the California Clean Air Act.

The federal Clean Air Act (CAA) is intended to ensure that all Americans have the same basic health and environmental protections with regard to air quality. The Act was last amended in 1990 and is enforced by the U.S. Environmental Protection Agency (EPA). The CAA establishes minimum air pollution standards that must be met, but allows states to enact and enforce stronger standards; the US EPA delegates much of the responsibility for carrying out the CAA to state air pollution agencies. State Implementation Plans (SIPs) are developed for areas out of compliance with federal standards, and are designed to meet ambient air quality standards and deadlines specified in the federal Clean Air Act and emission reduction targets of the California Clean Air Act. Required emission reductions and attainment deadlines are based on the severity of the region's air pollution.

The City of Cathedral City is located within the Salton Sea Air Basin (SSAB), a geographic region whose air quality and pollution control actions are regulated and monitored by the South Coast Air Quality Management District (SCAQMD). The SCAQMD is responsible for the development of the regional Air Quality Management Plan, a multi-tier effort to regulate pollutant emissions from a variety of sources.

Cathedral City is also involved in regional management of air quality through various actions taken by the Coachella Valley Association of Governments (CVAG) and the Southern California Association of Governments (SCAG). The City has adopted its own Fugitive Dust Emissions Ordinance to further local control of excessive fugitive dust and other particulate emissions, especially those associated with urban development.

Criteria Pollutants

Criteria pollutants are those air pollutants for which federal and state air quality standards exist and include ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, suspended particulate matter (PM_{10}) and lead. Each of these pollutants is briefly described below.

Ozone (O_3) is formed when byproducts of the internal combustion engine react in the presence of ultraviolet sunlight. Ozone is a pungent, colorless, toxic gas commonly referred to as smog. Motor vehicles are the major source of ozone precursors, and conditions in the Coachella Valley are occasionally well suited for the formation of photochemical smog. Excessive exposure to ozone can result in diminished breathing capacity, increased sensitivity to infections, and inflammation of the lung tissue.

Nitrogen dioxide (NO_2) is a reddish-brown gas that results from a combination of nitric oxide and oxygen. The primary sources of nitrogen dioxide in the Coachella Valley are the incomplete combustion of motor vehicle engines, power plants, and other industrial operations. Short-term exposure to nitrogen dioxide can result in airway constriction in healthy individuals and diminished lung capacity in individuals with asthma or chronic obstructive pulmonary disease.

Sulfur dioxide is a colorless, extremely irritating gas that results from the combustion of high-sulfur content fuels, such as coal and oil. Sources of sulfur dioxide include fuel combustion of motor vehicles, chemical plants and sulfur recovery plants. Short-term exposure to sulfur dioxide can result in airway constriction and severe breathing difficulties in asthmatics, as well as lung tissue damage and fluid accumulation in the lungs.

Carbon monoxide (CO) is a colorless, odorless, toxic gas largely caused by the incomplete combustion of fossil fuels in motor vehicles. In high concentrations, carbon monoxide can contribute to the development of heart disease, anemia and impaired psychological behavior.

Suspended Particulate Matter consists of fine suspended particles, such as soil and mineral dust, soot and smoke, and aerosols, many of which are byproducts of fuel combustion, tire wear and natural wind erosion. PM_{10} refers to finely divided solids or liquids that are ten microns (millionths of a meter) or smaller in diameter. PM_{10} is produced by direct particle erosion and

fragmentation, but can also be produced by sand deposited on road surfaces and ground into finer particles by motor vehicles. Fine particulate matter poses a significant threat to public health. Elevated PM_{10} levels are associated with an increase in respiratory infections and occurrences of asthma attacks. PM_{10} is currently (2001) the most serious air pollutant in the City and the Coachella Valley region.

Lead (Pb) occurs in the atmosphere as particulate matter resulting from leaded gasoline and the manufacturing of batteries, paint, ink and ammunition. The elimination of leaded gasoline in recent years has reduced the hazards associated with airborne lead. However, excessive exposure to lead can lead to anemia, kidney disease, gastrointestinal dysfunction, and neuromuscular and neurological disorders.

Ambient Air Quality Standards

Both the federal and California governments have established air quality standards for the criteria pollutants described above. The standards are designed to protect that segment of the population that is most susceptible to respiratory distress or infection, including asthmatics, the elderly, children, and those who are weak from disease or illness. In general, state standards are more restrictive than federal standards, particularly with the regard to PM_{10} and sulfur dioxide. A comparison of state and federal ambient air quality standards is provided in the following table.

Table IV-7
State and Federal Ambient Air Quality Standards

	State Standards		Federal Standards	
Pollutant	**Average Time**	**Concentration**	**Average Time**	**Concentration**
Ozone	1 hour	0.09 ppm	1 hour	0.12 ppm
Carbon Monoxide	1 hour	20.0 ppm	1 hour	35.0 ppm
	8 hours	9.0 ppm	8 hours	9.0 ppm
Nitrogen Dioxide	1 hour	0.25 ppm	AAM	0.053 ppm
Sulfur Dioxide	1 hour	0.25 ppm	AAM	0.03 ppm
	24 hours	0.04 ppm	24 hours	0.14 ppm
Suspended Particulate Matter (PM_{10})	24 hours	50 $\mu g/m^3$	24 hours	150$\mu g/m^3$
	AGM	30$\mu g/m^3$	AAM	50$\mu g/m^3$

Notes: ppm = parts per million ; $\mu g/m^3$ = micrograms per cubic meter of air
AAM = Annual Arithmetic Mean ; AGM = Annual Geometric Mean
Source: "1997 Air Quality Management Plan," South Coast Air Quality Management District

To determine whether existing ambient air quality complies with the standards shown above, the South Coast Air Quality Management District operates and maintains regional air quality monitoring stations throughout its jurisdiction. The City of Cathedral City is located within Source Receptor Area (SRA) 30, which includes monitoring stations at the Palm Springs International Airport and in the City of Indio. These stations monitor contaminant levels and meteorological conditions on a daily basis.

Sensitive Receptors

Sensitive receptors are those persons or land uses that may be subject to respiratory stress and/or significant adverse impact as a result of exposure to air contaminants. The California Air Resources Board has indicated that the following segments of the population should be considered sensitive receptors: children under 14, seniors over 65, athletes, and people with cardiovascular and chronic respiratory diseases. Sensitive land uses include hospitals, nursing and retirement homes, schools, playgrounds, parks, athletic facilities, and residential and transient lodging facilities.

Regional Climate and Meteorology

The air quality of a particular locale is a function of the amount of pollutants emitted and dispersed and the climatic, meteorologic, and geophysical conditions that reduce or enhance the formation of pollutants. The Coachella Valley is a low-lying desert basin characterized by low annual rainfall and low humidity. The valley is surrounded on the north, west and south by mountain ranges that physically isolate the region from coastal influences. Temperatures can exceed 120°F in summer months.

The valley is occasionally susceptible to air inversions, in which a layer of stagnant air is trapped near the ground where it is further loaded with pollutants. This process, when combined with chemical aerosols and other pollutants emitted by automobiles, furnaces and other sources, can result in substantial haziness. Heat and bright sunshine can further act on this mix of pollutants to create photochemical smog.

Wind direction and speed are also important climatological components that affect air quality in the Coachella Valley. The valley is subject to strong and sustained winds. Each year, winter rains cause erosion of the adjacent mountains, and water runoff produces and sorts substantial deposits of gravel and sand throughout the major drainage areas in the valley. These materials can become suspended in the air during strong wind events.

As the desert floor heats up in the spring months, it draws cooler coastal air masses from the narrow San Gorgonio Pass to the southeast, generating strong winds that cross the most erosive areas of the valley.

Most of the land within Cathedral City's incorporated boundaries is located within the "Active Blowsand Hazard Zone" designated by CVAG in the 1990 "State Implementation Plan for PM_{10} in the Coachella Valley." This zone identifies land that, based on location or soil characteristics, is subject to soil wind erosion, or to potential sand accumulation and/or abrasion.

These winds transport and deposit large quantities of sand and dust on buildings, fabrics and automobiles, thereby reducing visibility and damaging property. Extensive wind-borne soil can dirty streets, pit windshields and obliterate landscaping. Dust on vegetation can interfere with plant respiration and stunt plant growth. The adverse health effects in humans can be severe, and include reduced lung capacity and functioning.

Regional Pollutants of Concern

Analysis of the ambient air quality data collected at the Palm Springs and Indio monitoring stations indicates that ozone and PM_{10} are the most prevalent air pollutants in the Coachella Valley.

Ozone

The Coachella Valley has a history of exceeding state and federal ozone standards, and is currently designated as a "severe-17" ozone non-attainment area under the federal Clean Air Act. This designation means that the area must comply with federal ozone air quality standards by November 15, 2007, which is 17 years from the date the Clean Air Act was enacted.

Although some of the Coachella Valley's ozone is generated by motor vehicles and other local sources, the valley's poor ozone quality is largely due to the transport of both ozone and its precursor emissions from the upwind South Coast Air Basin to the west. An analysis of ozone trends since 1976, from SCAQMD's 1994 "Air Quality Management Plan for the Coachella-San Jacinto Planning Area," indicates a parallel downward trend in the number of days exceeding the federal 1-hour ozone standard for both the South Coast Air Basin and the Coachella-San Jacinto Planning Area. This downward trend has occurred despite the fact that population growth in the Coachella-San Jacinto Planning Area was about 3% greater per year than that of the South Coast Air Basin. Although it is difficult to quantify the total amount of ozone pollutant that is contributed from other regions, improved air quality in the Coachella Valley is partly dependent upon reduced ozone emissions in the South Coast Air Basin.

PM_{10} Emissions

The Coachella Valley also has a history of elevated PM_{10} emissions, which are the result of both man-made activities (including vehicle use and construction activity) and natural occurrences, such as windstorms. In 1990, the SCAQMD adopted the "State Implementation Plan for PM_{10} in the Coachella Valley," (90-CVSIP) which identified "reasonably available control measures" for PM_{10}, and established a future attainment date for areas previously unable to meet federal PM_{10} standards.

In 1993, the EPA reclassified the Coachella Valley from a "moderate" to a "serious" non-attainment area for PM_{10}. In response, CVAG and its member cities have worked closely to implement the measures set forth in the 90-CVSIP, including the adoption of city-based dust control ordinances, street sweeping programs, and the use of chemical stabilizers, wind/sand fencing, site watering techniques and landscape treatments designed to reduce local fugitive dust emissions.

The City of Cathedral City adopted its own Fugitive Dust Emissions Ordinance, which sets forth requirements for the control of dust during construction and demolition activities, as well as on certain land uses, such as unpaved roads and parking lots. In addition, the City secured grant funding to purchase alternative fuel vehicles and establish of a compressed natural gas (CNG) fueling station to service its vehicle fleet.

Although the Coachella Valley achieved federal PM_{10} standards in 1996, "attainment status" requires that the region achieve these standards for three consecutive years. In 1999, federal PM_{10} standards were exceeded once again. The region continues to be designated a "serious" non-attainment area for PM_{10}, with construction activity representing the most significant source of fugitive dust emissions.

In an effort to remedy this situation, the SCAQMD recently developed "Guidelines for Dust Control Plan Review in the Coachella Valley," which is intended to supplement local dust control ordinances. Should the region continue to fall short of federal PM_{10} standards, the U.S. EPA could impose more stringent regulations or sanctions on local jurisdictions.

FUTURE DIRECTIONS

It is the responsibility of the South Coast Air Quality Management District (SCAQMD) and the City, with the cooperation and coordination of Coachella Valley Association of Governments (CVAG), to monitor pollutant levels to regulate and control air pollutant emissions. The City has actively and effectively taken steps to control and improve air quality in the community. With continuing conditions that facilitate the generation of fugitive dust and other pollutants, clearly more needs to be done to effectively control and improve local air quality.

Issues of air quality are also addressed in California Government Code Section 65302(b), which requires that existing transportation-related air quality impacts and trends also are addressed. The General Plan EIR quantifies potential air pollutant emissions associated with the buildout of the community, including emissions associated with community traffic. Additionally, the California Clean Air Act (Assembly Bill 2595) requires the development of air quality policies and programs to protect and preserve the environment and general public from the harmful effects of air pollutants.

GOALS, POLICIES AND PROGRAMS

Goal

Preservation and enhancement of local and regional air quality to assure the long-term protection of the community's health and welfare.

Policy 1

The City shall be proactive in regulating local pollutant emitters and shall cooperate with Coachella Valley Association of Governments and the South Coast Air Quality Management District to assure compliance with air quality standards.

Policy 2

The City shall fully implement dust control ordinances, and coordinate and cooperate with local, regional and federal efforts to monitor, manage and reduce the levels of major pollutants affecting the City and region, with particular emphasis on PM_{10} emissions.

Program 2.A
On an on-going basis, the City shall continue to cooperate and participate in efforts to monitor and control PM_{10} emissions from construction and other sources, and all other air pollutants of regional concern. The City shall coordinate with CVAG and the SCAQMD to provide all reporting data for SCAQMD annual report.
Responsible Agency: Building and Public Works Departments, Planning Department, CVAG, SCAQMD
Schedule: Continuous and On-going

Program 2.B
The City shall maintain records of historic and current regional and local air quality trends and make them available to the public. Access to data may be made available via an Internet link, printed material or by other means.
Responsible Agency: Public Works Department, Planning Department, CVAG, SCAQMD
Schedule: 2003, On-going

Policy 3
City land use planning efforts shall assure that sensitive receptors are separated from polluting point sources, to the greatest extent practical.

Program 3.A
The General Plan Land Use Map and Element shall be developed and maintained to locate air pollution point sources, such as manufacturing operations and highways, at an appropriate distance from sensitive receptors, including hospitals, schools, hotels/motels and residential neighborhoods.
Responsible Agency: Planning Department, CVAG, SCAQMD
Schedule: 2003, On-going

Program 3.B
Buffer zones, between sensitive receptors and potential air pollutant emitters, shall be incorporated into new and proposed residential developments and other developments, to the greatest extent feasible.
Responsible Agency: Planning Department
Schedule: On-going

Policy 4
Development proposals brought before the City shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.

Program 4.A
The City shall conduct an Initial Study, and where appropriate, require a detailed air quality analysis for all proposals that have the potential to adversely affect local or regional air quality.
Responsible Agency: Planning Department
Schedule: On-going

Program 4.B
Projects that may generate significant levels of air pollution shall be required conduct detailed impact analyses and incorporate mitigation measures into their designs using the most advanced technological methods feasible. All proposed mitigation measures shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Planning Department
Schedule: On-going

Program 4.C
The City shall continue to enforce a Fugitive Dust Emissions Ordinance in an effort to reduce and control local PM_{10} emissions. All dust control mitigation plans prepared by contractors, developers, and other responsible parties shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Building and Public Works Departments, Planning Department
Schedule: On-going

Program 4.D
Provide consistent and effective code enforcement of construction and grading activities and off-road vehicle use to assure that the impacts of blowing sand and fugitive dust emissions are minimized.
Responsible Agency: Code Enforcement Department; Police Department
Schedule: On-going

Policy 5
The City shall encourage and promote the use of clean alternative energy sources for transportation, heating and cooling.

Program 5.A
Where cost-effective, vehicles that use alternative fuel sources, such as compressed natural gas and electricity, shall be purchased and maintained for use in the City's vehicle fleet.
Responsible Agency: City Manager's Office
Schedule: On-going

Program 5.B
Site plans shall incorporate energy-efficient design elements, including appropriate site orientation, possibility for incorporation of active and/or passive solar design, and the use of shade and windbreak trees, to reduce fuel consumption for heating and cooling.
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

Policy 6
The City shall encourage and support the development of facilities and projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle paths and lanes, and community-wide multi-use trails.

Program 6.A
The General Plan Circulation Element shall encourage the incorporation of appropriate alternatives to motor vehicles in the transportation network, and shall be periodically reviewed and updated to assure the future expanded use of such components.
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

Program 6.B
The City shall pursue land use patterns and mechanisms, including Multi-Use Corridor Districts and a balance of employment and housing opportunities that encourage pedestrian and other non-motorized transportation and minimize vehicle miles traveled.
Responsible Agency: Economic Development Department, Redevelopment Agency, Planning Department
Schedule: On-going

Policy 7
The City shall promote the expanded availability of mass transit services, coordinating with Sunline Transit Authority to link residential, commercial and resort business and employment centers with the City's residential neighborhoods and nearby communities.

Program 7.A
Coordinate with CVAG, SCAG, Sunline Transit Agency and other public and private service providers to improve, expand and optimize cost-effective regional mass transportation services.
Responsible Agency: Planning Department, Public Works Department, Sunline Transit Authority
Schedule: 2003, On-going

Program 7.B
Promote and support the development of ridesharing, carpooling, flexible work scheduling, telecommuting and Park and Ride programs among public and private employers to decrease existing and future traffic levels in the Coachella Valley.
Responsible Agency: Planning Department, Public Works Department, Sunline Transit Authority, Major Employers
Schedule: On-going

Program 7.C
The City shall consider adopting a Transportation Demand Management (TDM) Ordinance that applies to new or change-of-use non-residential developments employing 100 or more persons, and which requires the project proponent to demonstrate how the development will reduce the number of project-generated vehicle trips.
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

Policy 8
The City shall continue to implement effective street sweeping and post-windstorm cleanup programs to reduce the cumulative impacts of blowsand and nuisance dust resulting from construction activities, natural windstorms and other sources.

Policy 9
The City shall promote public educational programs that describe the causes of air pollution, encourage the use of alternative energy sources and recommend methods for reducing the impacts of blowsand.

Program 9.A
Prepare and distribute to developers, contractors, consultants and other related parties an air quality management manual that defines effective and appropriate methods of controlling and reducing development-related impacts, particularly PM_{10} emissions.
Responsible Agency: Building Department, Public Works Department
Schedule: 2003-04

OPEN SPACE AND CONSERVATION ELEMENT

PURPOSE

The purpose of the Open Space and Conservation Element is to provide guidance for the management and preservation of open space lands and natural resources, including water resources, wildlife habitat and scenic resources. Conservation of natural resources and the provision and preservation of open space lands are important and necessary to maintaining a balanced and healthy community. As urban growth continues in the City, thoughtful planning and resource management becomes increasingly important in helping to conserve natural resources and open space lands. One of the major objectives of the General Plan is to preserve and enhance the community, and to ensure that long-term growth within the City does not adversely affect environmental resources. The policies and programs set forth in this Element will help assure the preservation and long-term viability of valuable natural resources, and prevent the premature and unnecessary conversion of open space land to urban uses. The Open Space and Conservation Element represents the City's commitment to environmental quality as a key component to land use planning.

In function and content, the Open Space Element and Conservation Element, as defined by state law, often overlap. The requirements of state law result in conservation elements which are oriented toward the management of natural resources to prevent waste, destruction or neglect. The Open Space Element, in contrast, emphasizes open space as a land use and requires that preservation and management of natural resources be considered in land use planning and decision-making. This combined Open Space and Conservation Element describes conservation practices and open space lands, thereby meeting the requirements of both elements under law.

BACKGROUND

The Open Space and Conservation Element is almost exclusively dedicated to the conservation of natural resources and open space lands. The comprehensive issues addressed in this Element are directly related to many other General Plan Elements, including the Land Use, Circulation, Parks and Recreation, Biological Resources, Cultural Resources, Water Resources and the Geotechnical Element.

Open space land is generally defined as any parcel or area of land or water, which is essentially unimproved and devoted to an open space use. Open space areas are mainly lands designated for the preservation of natural resources, including plant and animal species, for passive recreational uses and for the production of resources (Government Code 65560(b)).

Government Code Section 65566, also known as the Open Space Lands Act, requires that local governments prepare open space plans before adopting required open space related ordinances. The Act helps assure consistency between the open space plan and zoning regulations.

Government Code Section 65561 states that the preservation of open space land is necessary, not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of resources, the enjoyment of scenic beauty, and for recreation and use of natural resources.

Government Code Section 65302(d) requires that General Plans include elements which address resource conservation issues. It also sets forth other topics that may be addressed, including reclamation, protection of watersheds, and resource degradation.

Resource Conservation

Demands on resources increase relative to increases in population. For this reason it becomes necessary for a community to periodically reassess its uses of these resources, particularly those that are finite and nonrenewable, or those that are critical to life support such as air and water. Furthermore, communities should be proactive in their attempt to be efficient and ecologically aware of the region and its limitations. Although the traditional need for resource conservation concerned itself with natural resources, it is also important for a community to assess the man-made cultural and historic resources it wishes to preserve for future residents. The following discussions offer a brief overview of Cathedral City's and the Coachella Valley's natural and cultural resources.

Scenic Resources

The aesthetic quality of a place is generally described by the combination of the natural and built environments. The Coachella Valley is surrounded by the San Jacinto, San Bernardino, Little San Bernardino, and Santa Rosa Mountains, which provide a dramatic backdrop to the area and contribute to the Valley's unique desert character. The predominant built environment within the Valley consists of resort developments that utilize oasis-like landscaping. Together, these scenic attributes blend to create an exceptional and rare place that is aesthetically pleasing and contributes to everyone's quality of life.

Biological Resources

The Coachella Valley's unique desert climate and topographical features create an environment that supports a wide variety of wildlife species, habitats and communities. The Sonoran Desert Creosote Community generally dominates the valley floor, and most of the planning area. This community consists of shifting windblown sand, sand fields and dunes with sparse vegetation and a number of uniquely adapted and special-status wildlife species. Other plant communities and wildlife habitats include Desert Fan Palm Oases, which are found in canyons and places with naturally occurring water, alluvial plain habitats, and desert dry wash habitats. The surrounding hillside habitat is an area of transition where the arid valley floor gives way to desert mountains with dense shrubbery and trees.

Within these areas the Coachella Valley hosts a variety of sensitive plant and animal species, some of which have been listed as threatened or endangered by federal and state governments. Most notable of these are the Peninsular bighorn sheep, Coachella Valley fringe-toed lizard, desert slender salamander, desert tortoise, California ditaxis and Coachella Valley milk vetch. The area also supports more common species, such as the chuckwalla, zebra-tailed lizard, Golden eagle, Peregrine falcon, Western burrowing owl, coyote and Palm Springs ground squirrel (also see the Biological Resources Element).

Historical Resources

The Coachella Valley contains abundant archaeological evidence, which documents the existence of prehistoric and historic human populations. Cultural resources found within the region include Native American settlements, as well as trails and other sites established prior to the arrival of European Americans. Historic structures and other sites used during early European settlement also exist throughout the Valley.

The Desert Cahuilla are the most prominent native culture to evolve in the Coachella Valley. Archaeologists believe that the Cahuilla traveled to the Coachella Valley from the north as early as 2,000 to 3,000 years ago. Several Native American villages are known to have developed in the Coachella Valley around the year 1200, and historic sites from this era include milling sites, quarries for making tools, and religious and artistic sites. The Cahuilla established a number of villages in the region, most of which were near the mountains and canyons and around ancient Lake Cahuilla. Today, the Cahuilla continue to inhabit portions of the Coachella valley (also see the Cultural Resources Element).

Water Resources

The majority of water resources in the region come from naturally occurring groundwater reserves. The Valley is underlain by a system of groundwater basins that are separated in distinct subbasins and subareas within subbasins. The Whitewater River subbasin serves as the primary groundwater repository for Cathedral City. The subbasin encompasses a major portion of the valley floor, covering approximately 400 square miles. It is divided into four subareas: Palm Springs, Thermal, Thousand Palms and Oasis. The Palm Springs subarea of the Whitewater River subbasin serves the planning area. The Palm Springs subarea is naturally recharged by infiltration of runoff from the San Jacinto and Santa Rosa Mountains, the Whitewater River and subsurface inflows from the San Gorgonio Pass subbasin. The groundwater storage capacity of the subbasin is estimated at 4,600,000 acre-feet. The quality of water extracted from the regional water basins is generally good to excellent. However, groundwater levels in the region have declined steadily due to increasing urbanization in recent decades. As an essential resource, water needs to be conserved and used efficiently (also see the Water Resources Element).

Energy Resources

Energy resources are integral in residential, commercial and industrial land uses, and especially in transportation. Currently, the majority of energy is derived from nonrenewable or environmentally damaging sources. In addition, most energy is not produced on a local or even regional scale and therefore can be expensive, inefficient and unreliable.

Energy conservation has become a major theme to energy usage in California. The basic concepts of energy conservation are using energy resources more efficiently through improved technology; the effective use of building design standards; reducing unnecessary use and dependence on nonrenewable sources; and conserving related resources. Development of renewable and alternative energy sources should also be a key component to energy conservation. Not only are renewable resources environmentally benign, they can be produced on a local scale, and are therefore more dependable and efficient. Solar power and wind power are two significant renewable energy resources that are increasingly being utilized in the Coachella Valley. The development of these renewable energy resources in conjunction with energy conservation measures will help to continue to meet the energy demands of the Valley (also see Energy and Mineral Resources Element).

Open Space Lands

Open space lands perform a number of vital functions in an urban environment. Incorporation of open space within a land use plan offers relief and contrast to high-density development, thereby establishing an attractive setting for urban activities and contributing to a community's quality of life. Open space can be utilized to establish edges or boundaries to a community or neighborhood, serve as a buffer between incompatible land uses, or provide opportunities for recreational activities. Protection of sufficient open space land promotes environmental quality by safeguarding valuable resources and maintaining the integrity of natural systems. Furthermore, access to open space areas, and preserving scenic landscapes, critical habitat, ecologically valuable land and recreational areas are critical components of livable communities and healthy economies. By and large, open space and land conservation benefit communities environmentally as well as economically.

In general, the State recognizes four broad categories of open space land including: open space for the preservation of natural resources, open space for resource management, open space for recreation, and open space for public health and safety. The following discussion defines each of these open space categories. While not all of these designations are relevant to the City and its sphere of influence, they are applicable on a regional level.

Open Space for the Preservation of Natural Resources

Open space for the preservation of natural resources refers to areas required for the protection of scenic resources, plant and animal species and crucial habitat, as well as areas required for ecologic reserves and scientific study. Habitat conservation in the Coachella Valley has become increasingly important due to the amount of federally listed species in the region. There are many areas within the Coachella Valley that are dedicated to the preservation and protection of plant and wildlife species. The following includes brief descriptions of open space areas for the preservation of natural resources.

Willow Hole-Edom Hill Preserve ACEC

The Willow Hole-Edom Hill Preserve/ Area of Critical Concern (ACEC) is located on 2,469 acres at the west end of the Indio Hills. It consists of two separate areas: Willow Hole and Edom Hill, which are 2 to 3 miles apart. Approximately 2,163 acres are owned by the Bureau of Land

Management (BLM), 90 acres by the Coachella Valley Mountains Conservancy, and 216 acres by private parties. The preserve is a unit under the Coachella Valley Preserve System for the Coachella Valley Fringe-toed Lizard Habitat Conservation Plan, and is classified as Class "L", Limited in the California Desert Conservation Area (CDCA). Class L means that limited use is allowed, to protect sensitive, natural, scenic, ecological and cultural resources. Important biological resources found on the preserve include mesquite hummocks, a fan palm oasis, and habitat for the Coachella Valley milk vetch, Little San Bernardino Mountains gilia, Palm Springs ground squirrel, Palm Springs pocket mouse, burrowing owl, crissal thrasher, and the Coachella Valley giant sand treader cricket. The preserve is also home to migratory birds, such as the least Bell's vireo, southwestern willow flycatcher, yellow-breasted chat and the yellow warbler. Management objectives and prescriptions include habitat protection through land acquisition and control of recreational uses.

Coachella Valley Thousand Palms Preserve
The Thousand Palms Preserve is situated in the western Coachella Valley in, and immediately south of the central portion of the Indio Hills. It consists of 13,030 acres of BLM, United States Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), California Department of Parks and Recreation, and Center for Natural Lands Management lands. The preserve is managed to protect and enhance the habitat of the Coachella Valley fringe-toed lizard. In 1980, the federal government listed the Coachella Valley fringe-toed lizard as threatened, due to the loss of crucial habitat. In April 1984, the Nature Conservancy purchased 1,920 acres of crucial habitat to ensure the protection of the lizard and other plants and animals that share its unique ecosystem. The preserve provides managed access to the site's palm oases and other areas of interest through a system of trails ranging from 1 to 6 miles.

Santa Rosa and San Jacinto Mountains
The Santa Rosa and San Jacinto Mountains contain many valuable biological and scenic resources. For that reason, many areas within these mountains have been protected and are managed under a variety of public land agencies.

The U.S. Forest Service manages lands within these mountains, designating them as Wilderness areas. The San Jacinto Wilderness is split into two units in the mountains south of the Coachella Valley on approximately 32,850 acres. The northern unit is made up largely of the San Jacinto Peak, while the southern unit incorporates lands along the ridgeline of the San Jacinto Mountains and includes the headwaters of Andreas, Murray and other desert canyons.

The Santa Rosa Wilderness lies in the Santa Rosa Mountains south of the Coachella Valley, and is situated on approximately 20,160 acres. Biological resources within these lands include diverse natural communities from Sonoran mixed woody and succulent scrub, to peninsular juniper woodland and scrub, to Jeffrey pine forest, and habitat for the peninsular bighorn sheep and gray vireo. These areas are covered under the San Bernardino National Forest Land and Resource Management Plan. According to this plan, wilderness is managed to provide for both recreational opportunities and resource and habitat preservation. However, management within the Santa Rosa Wilderness is also coordinated with CDFG and BLM for the protection of the peninsular bighorn sheep.

The Santa Rosa Mountains have also been designated as a National Scenic Area, which is managed by the BLM. It encompasses all BLM land in the Santa Rosa and San Jacinto Mountains. These areas outside the wilderness areas are classified as Class "L" (limited use to protect sensitive, natural, scenic, ecological and cultural values) in the BLM's California Desert Conservation Area (CDCA) plan. Currently (2001), there has been no management plan adopted for the Santa Rosa Mountains National Scenic Area.

In 2000, the Santa Rosa and San Jacinto Mountains were designated a National Monument. Management for these lands is included in the Santa Rosa Mountains Wildlife Habitat Management Plan. The Plan is implemented by the BLM and the CDFG in an effort to manage bighorn sheep and other sensitive species.

Multiple Species Habitat Conservation Plan (MSHCP)

The Multiple Species Habitat Conservation Plan (MSHCP) is currently being prepared by the Coachella Valley Association of Governments (CVAG) to develop principles, policies and regional proposals to conserve biological diversity on a regional scale. The Coachella Valley MSHCP is intended to provide a seamless network of adequate habitat for the protection and safekeeping of long-term viable populations of the species that are currently listed as threatened or endangered.

Open Space for Resource Management

Open space for the management of natural resources refers to those lands that contain resources which are utilized and developed, such as agricultural lands, areas containing major mineral deposits, areas of economic importance for the production of food or energy, and areas required for recharging groundwater or for water storage. In the planning area and surrounding areas, this open space designation represents the utility corridor along the northern portion of the planning area, areas within the Indio Hills that are suitable for the generation of wind energy, as well as significant drainage areas that help to replenish the groundwater reservoir.

Open Space for Recreation

Open space for outdoor recreation includes areas of outstanding scenic, historic and cultural value, areas that are suitable for park and recreational purposes, and areas that can serve as links between major recreation and open space reservations, including utility easements and trails and scenic highways corridors.

Golf courses represent an important source of recreation in the Coachella Valley, and are also central to the region's economy. Public and private golf courses comprise a substantial portion of open space lands in the City and surrounding areas. Parklands are another important source of open space for recreation. The City is home to five parks including, Century Park, Patriot Park, Second Street Park, Agua Caliente Park and Panorama Park (Also see the Parks and Recreation Element).

In addition to the active recreational opportunities that the City's parks provide, there are also numerous trails and facilities throughout the Valley that support passive recreation on a regional

scale, such as Joshua Tree National Park, the Living Desert, and the numerous mountain trails through the San Jacinto and Santa Rosa Mountains.

Open Space for Pubic Health and Safety

Open space for public health and safety refers to those lands that require special management or regulation because of hazardous or special conditions, such as earthquake fault zones, floodplains, unstable soil areas, and high fire areas. Although these lands remain open due to hazardous conditions, they have potential for other open space uses. Flood control facilities may be usable for wildlife habitat and for recreational purposes. Land located along fault lines can remain in its natural condition as a wildlife corridor. In the planning area and immediate vicinity, this category of Open Space is associated with the flood control facilities for the Whitewater River and other drainages, areas within the Indio Hills that are in close proximity to the fault line, and the Edom Hill landfill. While these areas are unsuitable for development, they do provide viable open space lands.

Open Space Land Use Categories

The General Plan provides for approximately 2,901.06 acres of open space lands, or 18% of the total planning area. The City maintains four Open Space land use categories, they are: Open Space-Private, Open Space-Public, Open Space-Watercourse and Open Space-Other. The types of designated open space land uses and the acreages of each are shown in the table below.

Edom Hill landfill

Table IV-8
General Plan
Designated Open Space Lands

Land Use	Designated Acres
Open Space-Private (OS-PV)	80
Open Space-Public (OS-P)	985
Open Space-Watercourse (OS-W)	1,521
Open Space-Other (OS-O)	531
Total	3,117

Private open space generally refers to the private golf courses located within the City, which constitutes about 27% of open space land. Public open space makes up approximately 33% of open space land and refers to the City's public parks and undeveloped public lands in the northeastern portion of the City. Open Space-Watercourse makes up the largest portion of open space within the City and its Sphere of Influence, representing 51% of open space land. This designation refers to the Whitewater River and the east, west and north portions of the Cathedral Canyon channel. Lastly, Open Space-Other represents the utility corridor for high voltage transmission lines within the northern portion of the City, and amounts to approximately 12.7% of the open space within the City.

Land Acquisition

One way to ensure the development or preservation of natural resources is through the designation of open space. Open space regulation provides means and methods of obtaining open space lands, and allowing land to be preserved for the good of the community. In California, many conservation programs and legislative enactments have been put into effect, including the Conservation Easement Act, Open Space Easement Act of 1974 and the Scenic Deed Act.

Programs and Legislative Enactments
To facilitate the continued preservation of open space in California, a number of conservation programs and legislative measures have been enacted. The following discussion presents a brief description of legislation associated with open space and natural resources conservation.

The Conservation Easement Act
The Conservation Easement Act (Civil Code Sections 815-816) was established to encourage the dedication of open space lands for ongoing conservation. A conservation easement is a voluntary agreement that allows a landowner to limit the type or amount of development on their property, while retaining private ownership of the land.

The easement is binding to successive owners of the land The purpose of a conservation easement is to retain land predominantly in its natural, scenic, historical, agricultural, forested, or open space condition. By granting conservation easements, a landowner can assure that the property will be protected forever, regardless of who owns the land in the future.

Open Space Easement Act
The Open Space Easement Act of 1974 (Government Code Sections 51070-51097) provides another mechanism for preserving open space land. This gives local governments the authority to accept easements granted to them or non-profit organizations for the purpose of conserving open space and agricultural lands.

The Scenic Easement Deed Act
The Scenic Easement Deed Act (Government Code Sections 6950-6954) authorizes local governments to purchase fee or scenic easements, but there is no special mechanism for obtaining them. Land uses are regulated by the Act, and local governments are authorized to adopt an ordinance, which establishes open space covenants with property owners.

Public Land Trusts
A public land conservation trust is another mechanism devoted to protecting open space, agricultural lands, wildlife habitats and natural resource lands. Land trusts achieve their objectives primarily through acquiring and managing interests in land.

Land conservation trusts can help to preserve open space and resource lands in a variety of ways. Trusts funds can be used to acquire fee simple interest in real estate to then manage or lease back holdings, or to purchase conservation easements that protect sensitive land from development.

Since they are less restrained by formalities and regulations, private land trusts are usually able to respond more quickly than governmental entities to purchasing opportunities. They also have more experience to help public agencies with the technicalities of acquisition. A public land trust helps to preserve environmentally sensitive open space and conservation lands, pursue State and Federal financing with grants and loans, and other assistance methods for the preservation of open space. Several land trusts exist in the Coachella Valley, including the Cathedral City Mountains Conservancy, the Coachella Valley Mountains Conservancy, The Nature Conservancy, The Living Desert, The Wildlands Conservancy, The Center for Natural Lands Management, and the Friends of the Desert Mountains.

Methods of Funding Open Space
Viable funding mechanisms are essential to financing the acquisition and management of open space lands. These mechanisms may include State obligation bonds, grants and tax increment financing. In addition to these funding mechanisms, the Legislature has helped organizations create grant and loan programs that can aid open space financing. These are available on a competitive basis for specific projects, and include:

- Land and Water Conservation Fund/Department of Parks and Recreation
- Habitat Conservation Program/Department of Parks and Recreation
- Simms Trail Bill/ Department of Parks and Recreation
- Public Access Program/ Department of Fish and Game
- Wildlife Conservation Board Program/Department of Fish and Game
- Urban Forestry Program/California Department of Forestry

FUTURE DIRECTIONS

The City of Cathedral City and its surrounding area are located within a unique desert environment that contains many valuable natural resources and open space lands. The City, as a priority, should continually pursue the safeguarding and protection of these resources in planning and decision-making. While growth will continue to occur in the region, the implementation of the General Plan, Zoning Ordinance and other regulatory mechanisms will help to promote conservation and ensure that development will not interfere with or interrupt open space and conservation lands in the future.

The City should continue to work with CVAG and the surrounding cities to establish a network of open space and conservation lands within the Valley. Regional support and participation of the Multiple Species Habitat Conservation Plan will also be essential in helping to secure a regional system of conservation lands for long-term preservation.

The City can also have an important role to play in encouraging and supporting the preservation efforts of non-profit and other conservation groups, and assist in acquiring additional open space lands. Assistance may also be provided in finding federal and state grants for purchase of conservation easement and/or fee simple ownership interest.

GOAL, POLICIES AND PROGRAMS

Goal

Preservation, conservation and management of open space, which provides for the protection of threatened species and environmental resources, enhanced scenic qualities and protection against environmental hazards.

Policy 1
Identify and assess lands in the City and its sphere-of-influence that are suitable for preservation as public or private, passive or active open space.

Program 1.A
With the assistance of CVAG, develop and routinely update a map and other information about various open space land and facilities in the City and sphere-of-influence.
Responsible Agencies: Planning Department, Parks and Recreation Department, CVAG
Schedule: 2002-2003

Program 1.B
Where appropriate, environmental hazard zones, including earthquake fault lines, floodways and floodplains, and steep or unstable slopes, shall be designated as open space on the land use map.
Responsible Agencies: Planning Department
Schedule: 2002-2003

Policy 2
Hillsides with slopes in excess of 10% grade shall be permanently preserved as undeveloped open space.

Program 2.A
The City shall seek recreational usage and/or ownership of desirable hillside lands currently owned by public agencies or private entities by negotiating public access provisions or establishing a transfer of development rights (TDR) program.
Responsible Agency: City Manager's Office; City Council
Schedule: Ongoing

Program 2.B
All but essential hillside modification on slopes steeper than 10% grade shall be prohibited.
Responsible Agency: City Engineer; Public Works Department
Schedule: Ongoing

Policy 3
Development on hillsides with slopes less than 10% grade shall be subject to special hillside development standards.

Program 3.A
Maintain and enforce a Hillside Preservation Regulations, which establish appropriate design standards that preserve the natural scenic value of hillsides.
Responsible Agencies: Planning Department
Schedule: 2002-2003

Program 3.B
Expand the existing Hillside Protection Ordinance to include hillsides in the Indio Hills as well as those in the Santa Rosa Mountains.
Responsible Agencies: Planning Department
Schedule: 2002-2003

Policy 4
The City shall provide for a comprehensive, interconnected recreational trails system.

Program 4.A
Coordinate with the Coachella Valley Water District and the Riverside County Flood Control District, and the utility purveyors to maximize use of flood control watercourses and utility easements for inclusion in multi-use trails system.
Responsible Agencies: Parks and Recreation Department
Schedule: 2002-2003, ongoing

Policy 5
The City shall preserve all substantial watercourses and washes necessary for regional community flood control and drainage for open space or multi-purpose recreational purposes.

Program 5.A
Confer and coordinate with the Coachella Valley Water District and other appropriate agencies to provide for the revegetation of flood control channels and ditches in order to retain as natural an appearance as possible without compromising functionality.
Responsible Agencies: Planning Department; City Engineer
Schedule: Ongoing

Policy 6
The City shall retain significant areas of natural desert, watercourse and hillside habitat, including migration corridors and wildlife preserves, in order to maintain and enhance the preservation of sensitive biological resources.

Program 6.A
Support and cooperate with local and regional habitat conservation efforts, including the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP).
Responsible Agencies: Planning Department, City Council
Schedule: Continuous

Program 6.B
Investigate the costs of additional land acquisition, maintenance and other administrative functions, and encourage the transfer of public open space and conservation properties to existing land trusts for local property management, where feasible.
Responsible Agencies: Parks and Recreation Department; City Manager's Office
Schedule: 2002-2003; Ongoing

Program 6.C
Cooperate with other agencies in order to assure the adequate maintenance of open space lands, including blowsand control, vegetation management, the removal of debris and trash, and restricted access where necessary.
Responsible Agencies: Code Enforcement
Schedule: Ongoing

Policy 7
Where feasible, the City shall preserve permanent open space edges or greenbelts, which define the physical limits of the City and provide physical separation between adjoining neighborhoods.

Program 7.A
The Land Use Map and Zoning Ordinance shall regulate development at the boundaries of the planning area to assure the preservation of a well-defined, functional or visual edge.
Responsible Agencies: Planning Department
Schedule: 2002-2003

Policy 8
Where possible, new development shall integrate existing pipeline, utility corridors and other easements into a functional open space network.

Program 8.A
Develop Specific Plans or special studies concurrent with initial development plans and tentative subdivision maps to plan continuous open space networks.
Responsible Agencies: Project proponents; Planning Department
Schedule: As development proposals occur

Policy 9
Native landscaping materials and oasis-like design features shall be incorporated into parks, golf course and other appropriate open space lands to retain and preserve the natural desert environment.

Program 9.A
The development and design review process shall assess the adequacy of proposed design features and landscaping materials.
Responsible Agencies: Planning Department; Architectural Review Committee; Planning Commission, City Council
Schedule: Ongoing

Policy 10
The City shall, to the greatest extent possible, regulate development in the vicinity of significant mineral resources located in the City and its sphere-of-influence.

Policy 11
Support and cooperate with the hillside and habitat conservation management programs of the Coachella Valley Mountain Conservancy.

ENERGY AND MINERAL RESOURCES ELEMENT

PURPOSE

The purpose of the Energy and Mineral Resources Element is to establish policies that direct the City's development, use and management of mineral and energy resources. Energy and mineral resources are essential components to the community, as they enable development and growth, enhance the quality of life and influence the local economy. However, traditional generation and use of these resources also raise a number of concerns. Many of the energy and mineral resources that are currently being utilized are in limited supply. Energy shortages and increasing utility rates have become a serious problem in California. This element is intended to be responsive to the community's dependence on these resources, and to identify opportunities for more local control.

This element includes discussions of conventional and renewable energy resources, quantifies energy use, and addresses mineral resources. The policies and programs in this Element should be considered tools to help the City find effective solutions to energy resource issues, while not negatively affecting its long term growth.

BACKGROUND

The Energy and Mineral Resources Element applies to several other elements in the General Plan, including Land Use, Open Space and Conservation, Air Quality, and to a lesser degree Housing, Community Design and Economic Development. A number of state and federal regulations pertain to energy and mineral resource issues. California Code Section 65560(b) directs cities to preserve energy and mineral resources. Government Code Section 65302(d) mandates the inclusion of resource conservation in General Plans, and includes issues to be addressed in this Element, such as reclamation, resource degradation and preservation for long-term use.

Some of the state regulations affecting mineral and energy resources include Title 24 building standards to reduce unnecessary energy use in new or substantially remodeled construction, and the State Solar Rights Act and Solar Shade Control Act, which facilitate the use of solar energy.

Energy Resources

Energy resources play a vital role in many land uses, and are particularly critical to transportation. Currently, the majority of energy is derived from limited and non-renewable resources. These resources are restricted and not viable for long-term production, and their production and use are damaging the environment. Furthermore, existing energy resources are

not managed locally, and therefore are not always readily available or dependable. Environmental degradation, energy shortages, rising energy costs, diminished reserves and uncertainties about future availability of resources have made traditional non-renewable energy resources an important subject of public discussion in recent months in California. Alternate sources of energy, which had limited exposure in recent years, are once again in the spotlight for future growth.

The following table provides a breakdown of the energy resources utilized in California, the percentage of total energy use that each resource contributes and estimated reserves. The percentage of energy from renewable energy resources in California is largely due to wind and solar farms, which are continually gaining popularity throughout the state. Other renewable resources that are utilized in smaller amounts include geothermal and biomass.

Table IV-9
Energy Use in California

Fuel	% of Energy Use	Reserves
Nuclear	14%	260 years
Coal	17%	220 years
Natural Gas	35%	60 years
Hydro Power	24%	
Renewable	10%	

While existing energy usage is heavily dependent on non-renewable sources, there are several renewable resources that offer sound alternatives to traditional energy systems. The following provides a brief description of conventional and alternative energy resources.

Conventional Energy Sources

Nuclear
Nuclear power development began in the late 1950's to fill in the deficit caused by predicted shortages of oil and natural gas. Nuclear power is derived from splitting uranium or plutonium atoms. While nuclear power plants produce no air pollution, they can pose grave risks to human health and the environment when malfunctions occur. In California, several nuclear power plants provide electricity throughout the state.

Coal
Coal is fossilized plant material preserved by burial in sediments and altered by geological forces that compact and condense it into a carbon-rich fuel. Coal was a prominent source of energy between 1870 and 1950. While coal is still used, the public health and environmental costs of coal extraction and use are great. About 65% of the sulfur dioxide, 33% of the carbon dioxide, and 25% of the nitrogen oxide emissions in the U.S. are produced by coal burning plants.

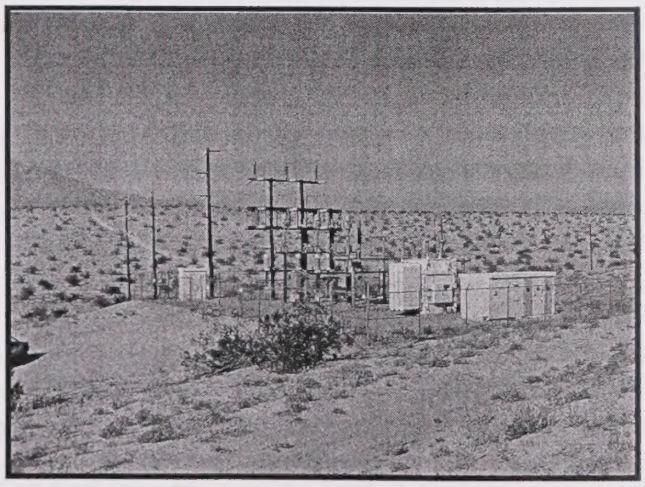
Natural Gas
Natural gas is the most rapidly growing energy source because it is convenient, cheap and clean burning. Although natural gas reserves will last for many decades, they are finite and as they become more scarce, the price will rise. Furthermore, natural gas is not as easy to transport in large quantities, and expansion of the pipeline system can have significant environmental impacts and be expensive.

Hydropower
Dams provide electricity by guiding water down a chute and over a turbine at high speed. Although water is considered a renewable resource, large-scale hydropower is a conventional source of energy. While it does not produce air emissions, large dams do raise some serious environmental issues, such as flood control, water quality and depletion of valuable fish and wildlife habitat. Therefore, while large hydropower is clean, it can have negative environmental impacts as well. However small-scale hydropower (less than 30 MW) projects are considered an appropriate use of water, with minimal environmental impacts, since they are not dependent on dams, and therefore do not affect watersheds and alter fish and wildlife habitat.

Renewable Sources of Energy Production

Geothermal
The earth's internal temperature can provide a useful source of energy. High-pressure, high-temperature steam fields exist below the Earth's surface. Geothermal energy is generated by converting hot water or steam from deep beneath the Earth's surface into electricity. Until recently, the main use of this energy source was in baths built at hot springs. Geothermal plants emit very little air pollution and have minimal impacts on the environment.

Biomass
Organic matter, called biomass, can be burned in an incinerator to produce energy. In newer facilities, the biomass is converted into a combustible gas, allowing for greater efficiency and cleaner performance. Biomass resources include agricultural, forestry and food processing byproducts as well as gases emitted by landfills.



Capwind Substation

Wind
The wind turbine is a source of clean, renewable energy. Wind turbines use strong, steady wind to create electricity. Wind power emits no pollution and has very little impact on the land. While expensive facilities are needed to store the energy created by windmills for use at non-windy times, wind power is cheaper than any other new energy source.

Solar
The sun's radiation is used directly to produce electricity in two ways: photovoltaic (PV) systems and solar thermal systems. PV systems change sunlight directly into electricity. Solar thermal systems use the sun's energy to heat a fluid that produces steam, which then turns a turbine and generator. The sun's radiation can also be used passively, through the use of certain building materials and designs, to improve heat gain in the winter and minimize it in the summer.

Electric Power

History of Power Services
Historically, electric utilities have been responsible for generating, transmitting and distributing electricity. Jurisdiction over the electric utility industry was divided between the Federal Energy Regulatory Commission (FERC), which regulated transmission and wholesale transactions in interstate commerce, and the states, which regulated local distribution and shareholder-owned utilities' retail sales. Traditionally, state public utility commissions (PUC's) have granted utilities exclusive franchise areas and required them to serve all customers in their areas at regulated rates that included generation, transmission and delivery, based on cost of service.

Deregulation
In 1998, Assembly Bill 1890 (AB 1890) deregulated the electric industry. Deregulation resulted in a shift from a regulated to a market-driven system, allowing consumers to choose their electricity provider. Deregulation has led to the restructuring of the energy system, resulting in the creation of two new entities: the Independent System Operator (ISO) and the Power Exchange (PX), which are both independent of the utility companies.

The California ISO is a not-for-profit corporation that has control of the long-distance, high-voltage power lines that deliver electricity throughout California, and between neighboring states and Mexico. The first participants in the ISO were the state's three investor owned utilities (IOU's): Pacific Gas & Electric, San Diego Gas & Electric and Southern California Edison.

These utilities were mandated by AB 1890 to release control, but not ownership of their transmission lines to the ISO, enabling other energy generators to transmit energy to consumers. The mission of the California ISO is to ensure that the power grid is safe and reliable and that there is a competitive market for electricity in California.

The California Power Exchange (PX) provided a competitive marketplace where buyers and sellers of power complete traded through an electronic auction. An independent board managed the PX, with representatives of various constituencies involved in the electric power industry. It belonged to the people of California and was created to benefit the public. The PX was not a government agency, nor a utility, nor a generating facility.

The last year (2001) has demonstrated the effects of deregulation, and the ultimate outcome is still to be determined. In the near term, Cathedral City and the other Coachella Valley cities can influence the impacts which deregulation has on residents and businesses by offering conservation initiatives, developing and regulating local power generation, and by influencing energy policy on a regional and state level. The City must also continue to monitor the

development of private energy plants, including the Peaker plant recently built to the west of the City.

Southern California Edison

Southern California Edison (SCE) is the electric service provider for the City of Cathedral City. High voltage transmission lines deliver power to substations where power is stepped down and distributed through lower voltage lines. Residences and businesses then receive power through a transformer, which reduces voltages to safe levels.

SCE offers rebates for the installation of energy efficient equipment, including air conditioning units, refrigerators and even light bulbs. For residential customers, the Automatic Power Shift program allows substantial savings from June through October, in exchange for allowing SCE to remotely cycle-off selected air conditioning units during peak periods of heavy use and potential power outages. A similar program, the Interruptible Customer Program, is available for commercial customers.

Natural Gas

Natural gas is becoming a more widely used resource, which has lower environmental impacts than most electric generation facilities. It is transported throughout the country by high-pressure transmission lines, and is available to commercial, industrial and residential users throughout the City.

The costs of natural gas vary depending on the season and amount of use, but are currently still affordable throughout the year. Although gas supplies are still abundant, the rapidly increasing demand is expected to affect availability and cost in the future.

Southern California Gas Company

Natural gas is provided to the General Plan planning area by the Southern California Gas Company (SCG). SCG's services include detailed technical assistance and incentive programs that address a wide range of use issues, land use planning, service extension and use-specific technical consulting/problem solving. In addition, SCG has developed a wide range of energy management, conservation and equipment retrofit programs for its customer base. These programs include core nonresidential customers equipment rebates of up to 20% of the cost of qualifying equipment. Assistance in facilities planning and analysis is also provided to maximize energy efficiency and cost-effective equipment purchases and operations. SCG's Air Quality Assistance Program provides users with information on current and upcoming energy regulations, and helps them implement these regulations as well. SCG also actively participates in the development of new technologies, primarily for industrial users.

Renewable Energy Resources in the Coachella Valley

The City benefits from two abundant renewable resources: sunshine and periods of high winds. The San Gorgonio Wind Resource Area, which extends from the San Gorgonio Pass into the City's Sphere-of-Influence, provides an important resource for the electric generation system in this State. The number of sunny days, and the intensity of the sun in the Valley, make solar

energy generation an important resource as well. Both of these resources provide practical and cost-effective alternatives to conventional energy.

Renewable energy resources provide an endless supply energy, and can significantly reduce dependence on traditional energy sources. Local generation of renewable energy can also create an opportunity for economic development for both the City and the region.

Wind Energy
The early wind energy projects in the Valley occurred in the mid-1980's, on U.S. Bureau of Land Management (BLM) and County of Riverside lands. The cities of Desert Hot Springs and Palm Springs now have jurisdiction over wind farms which they annexed in the 1990's.

The areas of the Valley particularly suitable to the generation of wind power were originally delineated in the *San Gorgonio Wind Resource Study*. Additional analysis has refined and expanded on the Study, resulting in a Valley-wide understanding of the location of the wind resource area that is economically viable.

The cost of wind-generated electricity is now equal to or lower than electricity generated by coal or natural gas. Its primary limitation is its lack of constancy – in order to make the resource more generally dependable, storage of the energy generated is required.

Solar Energy
Photovoltaic systems have traditionally been very expensive, and therefore not often installed. Although in recent years, the costs have come down, photovoltaic power is still used only in limited applications. Photovoltaic systems are appropriate as stand-alone power systems and as integrated components of building design and construction, and are slowly becoming more widely used.

Residents in the Coachella Valley have for many years used solar thermal systems for domestic hot water production and to heat their swimming pools. Most cities in the Valley also consider passive solar design when reviewing development projects, and include them in their design guidelines. The intense solar insulation which facilitates both solar thermal and photovoltaic use puts Cathedral City in an ideal position for use of this resource by its residents and businesses alike.

Hydrogen Fuels
As technologies change and develop, new and better fuels, including hydrogen fuels, which are dependent on renewable rather than non-renewable sources, will become more practical for everyday use. Hydrogen fuel cells convert energy into electricity with no harmful byproducts. Hydrogen fuel applications are developing at a rapid pace, and can be used as primary power sources when combined with other renewable energy sources such as solar or wind power.

Regional Research, Development and Implementation Programs

Two entities have taken the lead in the research, development and implementation of new energy resource programs in the Valley: the SunLine Transit Agency and College of the Desert.

Several years ago, SunLine converted all its vehicles to compressed natural gas, including its buses, vans and service vehicles. Since the conversion, city vehicles, post office delivery trucks and taxicabs have also been converted to compressed natural gas. The conversion from diesel fuel to compressed natural gas represents an important reduction in air emissions generated by vehicles in the Valley.

In recent years, SunLine has also worked with the City of Palm Desert in developing hydrogen fuel cells to power vehicles. SunLine now operates a complete hydrogen fuel facility which produces, compresses, stores and dispenses hydrogen fuels for vehicles operated by Palm Desert for gardening and maintenance.

The College of the Desert operates the Energy Technology Training Center (ETTC) and the Advanced Transportation Technologies Initiative (ATTI). The ETTC has provided training in alternative fuels technology since 1993, and is a model for such programs now being developed for nine other community colleges in the State. The ATTI program trains and retrains workers to be able to convert, service and repair advanced alternative fuel vehicles now and into the future, through programs available at a network of community colleges throughout the state.

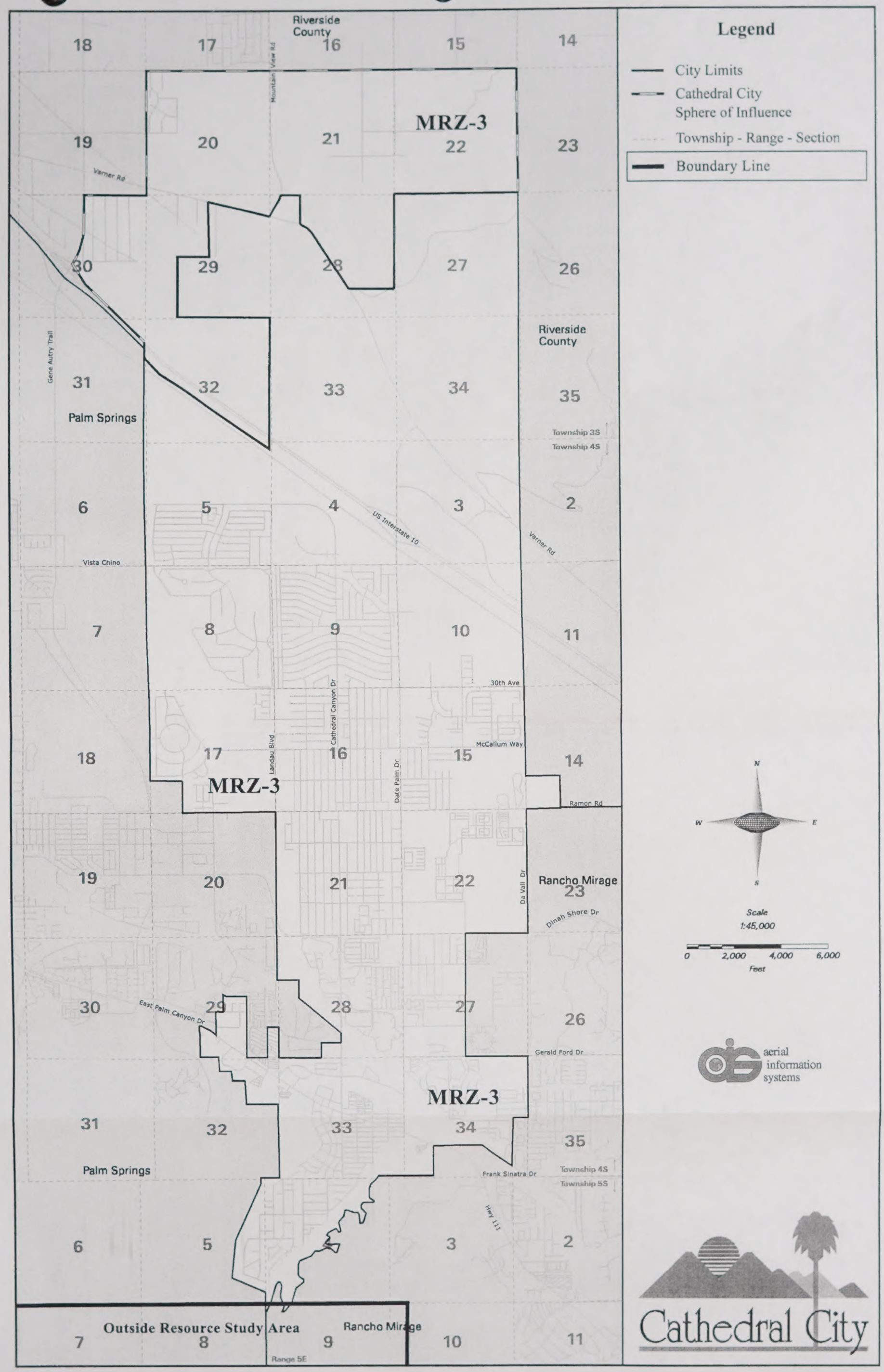
Mineral Resources

Mineral resources are naturally occurring crystalline substances which are economically valuable, and include iron, sand and gravel and limestone. Mineral resources provide materials for a variety of uses, making them important to community development and commerce.

The importance and value of mineral resources, coupled with their limited availability, make careful planning a necessity. Moreover, the mining, processing and distribution of mineral resources have broad and varied implications on the environment. Surface mining can scar the landscape for hundreds of years if a mine is not adequately reclaimed. The Surface Mining and Reclamation Act was established to deal with these issues. Its objective is twofold: ensuring the conservation and wise use of mineral resources while concurrently addressing environmental protection from mining impacts.

Locally Important Mineral Resources

Significant accumulations of sand and gravel, commonly referred to as 'aggregate' are found throughout the Valley, resulting from the transport of soils and rocks from the mountains surrounding the Valley to the Valley floor. Aggregate represents 80% to 100% of the contents of asphalt, concrete, road base, stucco and plaster. Aggregate products are now being recycled when roads are resurfaced and buildings demolished, so that new asphalt and concrete can be created without additional mining.



TERRA NOVA®
Planning & Research, Inc.

City of Cathedral City
General Plan
Mineral Resources in the Planning Area

Exhibit
IV-10

Sand and gravel resources in the Valley were identified and mapped by the California Department of Conservation, Division of Mines and Geology in 1988, as required by the Surface Mining and Reclamation Act. The report identifies significant mineral deposits in the region, in an effort to protect them from incompatible land uses and conserve them for future development.

The report used three categories for identifying mineral resources:

MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.

MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data.

As shown on the state mineral resources map, only Mineral Resource Zone 3 (MZR-3) is applicable to the City and its sphere-of-influence. MZR-3 generally refers to areas where development has limited the ability to determine the presence or amount of mineral resources.

FUTURE DIRECTIONS

The use of energy and mineral resources is critical to our current lifestyles. The manner in which we have mined, farmed or otherwise collected these resources has caused environmental degradation, impacted wildlife habitat, affected our water and air quality, and been directly and indirectly associated with adverse public health effects. Whether applied to the generation of electricity or the mining of sand, the future of both mineral and energy resources is dependent on our wise and carefully considered use of traditional resources, and our aggressive pursuit of new and renewable options.

Steadily increasing economic and environmental costs associated with energy production and use are forcing communities and countries to develop new energy policies. The community approach to energy problem-solving can be a good alternative to the energy crisis in California. This "soft path" approach, with its emphasis on local control, renewable resources and community-scale technologies, is gaining favor in many communities.

GOAL, POLICIES AND PROGRAMS

Goal

The appropriate use of energy and mineral resources to assure that both limited and renewable resources are sustainable in the long-term.

Policy 1
Encourage conservation in the planning and construction of urban uses and in the regional transportation system.

Program 1.A
The City shall encourage Southern California Edison to develop energy conserving standards for all public office buildings and facilities that significantly reduce energy usage.
Responsible Agency: City Council, City Manager's office, Southern California Edison
Schedule: Immediate; Continuous

Program 1.B
The City shall provide developers with available data on energy efficient and conserving building design and technologies, including passive solar site design. This information should be collected from trade organizations, state agencies and others as it becomes available.
Responsible Agency: Building Department; Planning Department; Building Industry Association
Schedule: Continuous

Program 1.C
Encourage Southern California Edison and other providers to provide public education on energy conservation.
Responsible Agency: City Manager's Office
Schedule: Continuous

Program 1.D
The City shall participate in the energy management and conservation efforts of SunLine Transit and encourage the expanded use of compressed natural gas, buses with bike racks and other system improvements, which enhance overall energy conservation.
Responsible Agency: City Manager's office; Economic Development Department; City Council
Schedule: Continuous

Policy 2
The General Plan and other City documents, such as the 5 Year Capital Improvement Program, shall assure an efficient circulation system and land use pattern in the City which minimizes travel.

Program 2.A
Amendments to the land use map and Land Use Element shall consider the provision of convenient neighborhood shopping, medical and other professional services appropriately located to minimize travel and facilitate the use of alternative means of transportation.
Responsible Agency: Planning Department
Schedule: Continuous

Policy 3
Support the long-term strategies, as well as state and federal legislation and regulations, that assure affordable and reliable production and delivery of electrical power to the community.

Program 3.A
The City shall participate in regional efforts to provide affordable, dependable electric power to its residents and businesses, including CVAG efforts and regular consultation with SCE.
Responsible Agency: Planning Department, City Council; CVAG
Schedule: 2001-2002, Ongoing

Program 3.B
The City shall participate in regional efforts to influence state and federal legislative and regulatory agendas that address the current and future energy needs of the City's residents and businesses.
Responsible Agency: City Council; CVAG
Schedule: 2001-2002, Ongoing

Policy 4
Continue to proactively support and participate in efforts to develop and operate alternative systems which take advantage of local wind, solar and other renewable resources.

Program 4.A
Evaluate the use of co-generation and other energy management systems for new larger industrial and commercial businesses in the City as they arise.
Responsible Agency: Planning Department; Building Department
Schedule: Continuous

Program 4.B
Encourage and support the aesthetic expansion and enhancement of wind farms within the planning area, including Edom Hill, Flat Top Mountain and other viable locations for generating community-scale electric power.
Responsible Agency: Planning Department; City Council
Schedule: 2002; Continuous

Policy 5
The City shall support alternative fuel sources and modes of transportation as a means of reducing transportation related energy demand.

Program 5.A
Facilitate the development of a community-wide and regional bike path system to provide residents and visitors an alternative mode of transportation.
Responsible Agency: Planning Department; City Council
Schedule: 2002; Ongoing

Program 5.B
The City shall make information on ridesharing and mass transit available to residents and businesses, at City Hall and elsewhere in public buildings.
Responsible Agency: Public Works
Schedule: Ongoing

Policy 6
Support the use of solar energy systems, including but not limited to solar thermal and photovoltaics in building design and construction.

Program 6.A
The City shall provide developers and builders with information on commercially available solar thermal and photovoltaic energy systems at City Hall, and shall consider a City-run program of discounted solar panels for home use.
Responsible Agency: Building Department
Schedule: 2002; Ongoing

Policy 7
Large scale, alternative energy generation facilities shall be sited in a manner which minimizes the effects of excessive noise, pollution, and other adverse impacts on surrounding land uses.

Program 7.A
Evaluate noise, safety, and visual impacts associated with energy production facilities, and require acoustical or other special studies as necessary to develop mitigation programs to reduce significant impacts.
Responsible Agency: Planning Department
Schedule: Ongoing

Policy 8
Support regional efforts to provide mineral resources which ensure an affordable supply for building materials and public works construction projects.

Program 8.A
The City shall cooperate with regional agencies such as CVAG in monitoring proposals for new sand and gravel projects, as well as the adequate reclamation of existing facilities.
Responsible Agency: Planning Department; City Manager's office; City Council
Schedule: Continuous

Program 8.B
The City shall require builders to recycle construction waste, including cement, asphalt and gypsum board, whenever possible.
Responsible Agency: Building Department; Economic Development Department
Schedule: Continuous

CITY OF CATHEDRAL CITY

COMPREHENSIVE GENERAL PLAN

CHAPTER V

ENVIRONMENTAL HAZARDS

This chapter of the General Plan addresses those man-made and natural environmental hazards which occur in the City of Palm Desert and surrounding areas. General Plan elements discussed under this chapter include Geotechnical, Flooding and Hydrology, Noise, and Hazardous and Toxic materials. The assessment of and planning for these hazards or constraints is the primary purpose of this chapter of the General Plan.

GEOTECHNICAL ELEMENT

PURPOSE

The purpose of the Geotechnical Element is to describe the geotechnical conditions facing the City and to establish goals, policies, and programs which protect the community from seismic and related hazards. The Element and its supporting documentation are also intended to serve as an information database, which guides future development and land use policies and educates City residents about potential geotechnical hazards and methods to mitigate their impacts.

BACKGROUND

The Geotechnical Element, which focuses on the physical characteristics of the City and the safety of its residents, is directly related to a number of other General Plan elements, including the following: Land Use, Circulation, Housing, Public Buildings and Facilities, Water Resources, Flooding and Hydrology, Emergency Preparedness, Police and Fire Protection, and Water, Sewer and Utilities. The Geotechnical Element addresses potential seismic and related hazards, which can result in significant property damage, generate exorbitant clean-up and reconstruction costs, and interrupt the day-to-day operations of the City. In this regard, the Geotechnical Element is also related to the Economic Development Element.

A wide range of state legislation, including the California Government Code and Public Resources Code, requires that the City address geotechnical hazards and seismic safety issues. Per California Government Code Section 65302(g), the General Plan is required to address the need to protect the community from unreasonable risks associated with the effects of known geologic hazards, such as seismically induced ground shaking, subsidence, and ground rupture and failure. According to Government Code Section 65303, the General Plan may also address other subjects relating to the physical development of the community. This is accomplished, in part, by the Geotechnical Element, as well as the Flooding and Hydrology, Emergency Preparedness, and other elements of this Plan.

Perhaps the most important piece of state legislation relating to seismic safety is the Alquist-Priolo Earthquake Fault Zoning Act (found in Public Resources Code Sections 2621 et. seq.), which is intended to protect human life and property from the hazards associated with fault rupture. The Act and its impact on development in Cathedral City are described in this element.

Government Code Section 8876 establishes a program through which the City and other jurisdictions located within the most severe seismic shaking zone, Zone 4 (as set forth in Chapter 2-23, Part 2, Title 24 of the Administrative Code), shall identify all potentially hazardous or substandard buildings and establish a program for the mitigation of these structural inadequacies.

Geologic Setting

The City of Cathedral City is located within the northwesterly portion of the Salton Trough, a narrow, low-lying tectonic depression that began forming about 5 million years ago. The rocks and sediments exposed at the surface of the General Plan planning area, which can be classified based on their age, include:

1) Mesozoic and older (66 million years old and older) rocks in the Santa Rosa Mountains,
2) Pleistocene (11,000 to 1.6 million years old) sediments on Edom Hill, Flat Top Mountain, and the northwestern portion of the planning area, and
3) Holocene (0-11,000 years old) sediments on the valley floor.

The distribution of these sediments within the planning area is illustrated in Exhibit V-1. Their geologic and hydrologic characteristics are responsible for a number of geologic hazards and engineering challenges, which are described throughout this element.

Metasedimentary Rocks

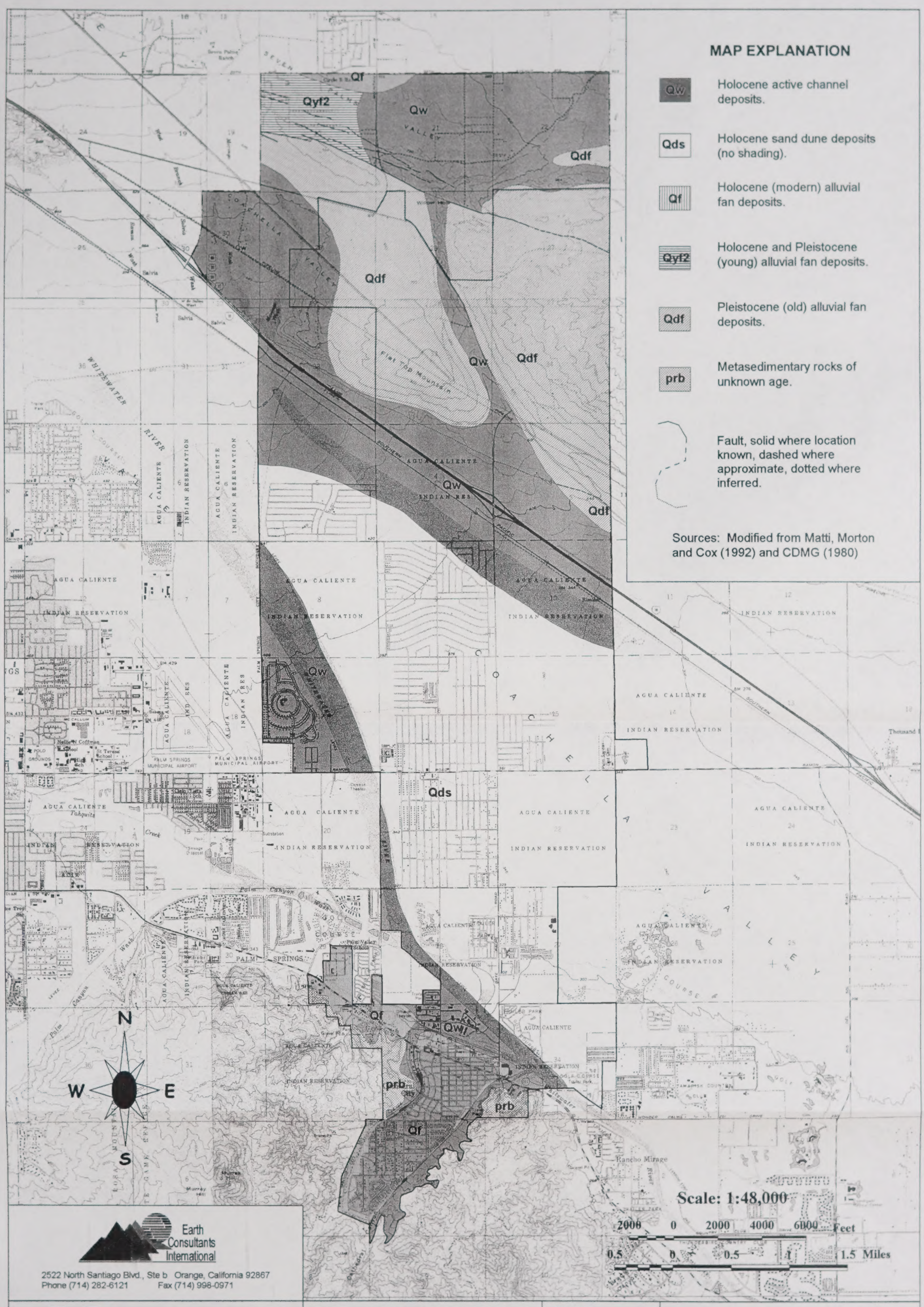
The oldest sedimentary rocks, which overlie volcanic rock and basement bedrock, are conglomerates consisting of granitic and metamorphic debris. Within the General Plan planning area, these units are limited to the slopes of the Santa Rosa Mountains (map symbol **prb** on Exhibit V-1). The mountains consist of metamorphic rock of unknown age, which has been intruded by Early to Late Cretaceous (80 to 120 million years ago) crystalline rocks. The metamorphic rocks consist primarily of foliated schists and gneisses, which were probably derived from ancient marine sediments.

The metasedimentary rocks found in the planning area are typically non-water bearing, except where they are extensively jointed and fractured. Although joints, shears, and foliation provide avenues for water penetration, these units have low to moderately low permeability. Unweathered rock cannot be easily excavated, and blasting is usually required.

Alluvial Sediments

The most recently deposited sediments in the planning area are of alluvial (stream-deposited) or aeolian (wind-deposited) origin. Alluvial surfaces can be differentiated based on age and the degree of dissection and soil development. The youngest alluvial materials, known as active channel deposits, have no soil development and occur within the active stream channels of the planning area (map symbol **Qw**). These sediments are associated with the watershed of the Whitewater River, including the Salvia and Morongo Washes south of the Indio Hills and the Cathedral Canyon drainages at the base of the Santa Rosa Mountains. They also occur north of the Indio Hills.

Alluvial sediments that are slightly elevated above the active stream channels and slightly more dissected are classified as **Qyf2**, and occur in the northwestern corner of the planning area.


MAP EXPLANATION
Qw
Holocene active channel deposits.
Qds
Holocene sand dune deposits (no shading).
Qf
Holocene (modern) alluvial fan deposits.
Qyf2
Holocene and Pleistocene (young) alluvial fan deposits.
Qdf
Pleistocene (old) alluvial fan deposits.
prb
Metasedimentary rocks of unknown age.
Fault, solid where location known, dashed where approximate, dotted where inferred.
Sources: Modified from Matti, Morton and Cox (1992) and CDMG (1980)
Qf
Qyf2
Qw
Qdf
Qds
prb
N
S
E
W
Scale: 1:48,000
2000 0 2000 4000 6000 Feet
0.5 0 0.5 1 1.5 Miles
Earth Consultants International
2522 North Santiago Blvd., Ste b Orange, California 92867
Phone (714) 282-6121 Fax (714) 998-0971
TERRA NOVA®
Planning & Research, Inc.
CATHEDRAL CITY GENERAL PLAN
BASE MAP: USGS Topograghic Map Sure!RASTER MAPS
City Limits:
City SOI:
DATE: September 10, 2001
Exhibit V-1
Geologic Map of Cathedral City and its Sphere of Influence

Coarse, poorly sorted sands and gravels are referred to as alluvial fan and stream-wash deposits (map symbol **Qf**), and occur at the base of the Santa Rosa Mountains, on the alluvial fans emanating from Cathedral Canyon.

Alluvial plain sediments are typically loose near the ground surface, but become denser with increasing depth. They have medium to high permeabilities, except where silt layers retard the percolation of water. Because these units can be readily compacted with a combination of saturation and wheel rolling with rubber-tired construction equipment, they are generally suitable for use as compacted fill. Shrinkage of 20% to 30% can be expected upon compaction.

Alluvial fan sediments, which are dry with higher permeabilities, are also generally suitable for use as compacted fill. Compaction of the near-surface soils can be expected to result in up to 15% shrinkage.

The sediments that crop out in the Indio Hills are composed of Ocotillo Conglomerate, although some geologic sources refer to them as "oldest alluvial fan deposits," which are believed to be late Pleistocene in age (map symbol **Qdf** on Exhibit V-1). Ocotillo Conglomerate consists of pebble to cobble-sized sub-rounded clasts of locally derived gneisses and granites, with a lesser amount of basic volcanic rock, limestone, and pegmatite. It is approximately 2,400 feet thick in the Edom Hill area. The Ocotillo Conglomerate is the principal water-bearing unit of the upper Coachella Valley and typically has high concentrations of clay and a moderate potential for expansion (see "Expansive Soils" section below).

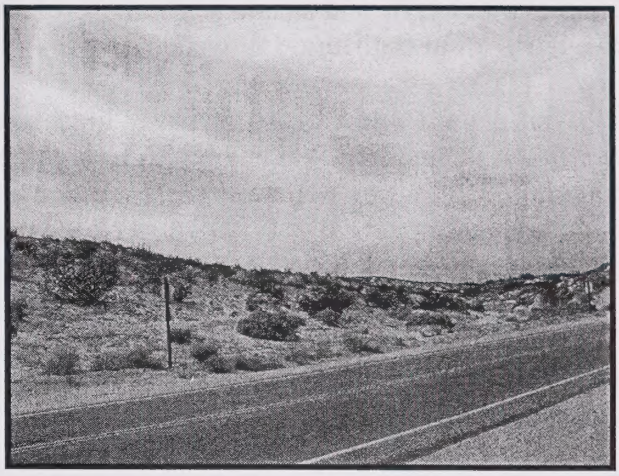
Aeolian Sediments

Wind-deposited (aeolian) sediments, which are typically alluvial in origin, are also referred to as sand dune deposits (map symbol Qds). These silty, fine and medium-grained soils are picked up and transported by strong winds emanating from the San Gorgonio Pass at the northwesterly edge of the Coachella Valley. They are redistributed along the central valley floor where they form shifting sand dunes. A thick accumulation of these windblown sands has formed the Palm Springs Sand Ridge, which rises as much as 100 to 120 feet above the valley floor and covers a significant portion of the General Plan planning area. As shown in Exhibit V-1, windblown deposits underlie much of the developed portion of the planning area.

Aeolian deposits are typically loose near the ground surface, but become denser with increasing depth. Like alluvial deposits, they are generally suitable for use as compacted fill, as they can be readily compacted with a combination of thorough wetting and wheel rolling with rubber-tired construction equipment. These units typically have high permeabilities, and shrinkage of up to 30% can be expected upon compaction.

Geologic Hazards

Slope Instability



View of sand ridge at Mountain View Avenue

Land adjacent to the Indio Hills and the east to northeast-facing slopes of the Santa Rosa Mountains have a moderate to high susceptibility to rock falls and landsliding. The metasedimentary and intrusive rocks that characterize the slopes of the Santa Rosa Mountains have several planes of weakness, including joints, fractures, and foliation. Depending on their orientation to man-made cuts in the soil, these areas could be susceptible to failure. Additionally, as these rocks weather, they can form rounded boulders which perch precariously on steep slopes and pose rock fall hazards down slope. Earthquake induced landslides and rock falls may occur in both the Indio Hills and Santa Rosa Mountains and are addressed in subsequent sections of this element. Mitigation of these hazards is best accomplished by avoiding development on steep slopes and implementing structural setbacks at the toe of slopes. Any proposed development adjacent to steep slopes of the Santa Rosa Mountains or Indio Hills should include an analysis for potential slope instability.

Collapsible Soils

Soil collapse, or hydroconsolidation, occurs when soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. This phenomenon typically occurs in recently deposited Holocene soils in a dry or semi-arid environment, including aeolian sands and alluvial fan and mudflow sediments deposited during flash floods. The combination of weight from a building or other structure, and an increase in surface water infiltration (such as from irrigation or a rise in the ground water table) can initiate rapid settlement and cause structural foundations and walls to crack.

Alluvial and aeolian sediments in the planning area have the potential for collapse. Where development is proposed on these soils, this hazard should be evaluated as part of site-specific geotechnical evaluations, and recommendations should be made to mitigate the potential hazard. These studies should include analysis of the settlement potential of the entire soil column to the effective depth of infiltration of irrigation water, rather than only the near-surface soils. Additional recommendations which can mitigate these impacts include pre-watering of susceptible soils to induce collapse prior to construction, designing drainage to flow away from structures, avoiding open-bottomed planters adjacent to structures, using roof gutters to direct drainage away from foundations, and limiting the use of irrigation water.

Expansive Soils

Expansive soils contain significant amounts of clay particles that have the ability to give up water (shrink) or take on water (swell). When these soils swell, the change in volume can exert

significant pressures on loads that are placed on them, such as buildings, and can result in structural distress and/or damage.

Given the relatively minor amount of clay present in soils in Cathedral City, expansive soils are not considered a hazard in the planning area. Although the older fan deposits of the Indio Hills may contain clay-rich soils near the surface, these units are typically removed and recompacted during grading. Mixing of soils during this process is expected to reduce their expansion potential.

Ground Subsidence

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement, and is usually associated with the extraction of oil, gas, or ground water from below the ground surface. Water contained in subsurface clay layers is squeezed out, and the clay is compacted by overlying sediments. Subsidence can result in the disruption of structures that are sensitive to slight changes in elevation, such as wells, canals, and sewer pipelines, as well as changes to surface drainage, reductions in aquifer storage, and the formation of earth fissures.

Subsidence as a result of groundwater withdrawal is one of the major environmental constraints facing the Coachella Valley, although most evidence of regional subsidence has been observed in the eastern Coachella Valley. Since the late 1970s, the regional demand for groundwater has exceeded the supply, and the ground water basin in the Coachella Valley is currently in a state of overdraft.

Ground surface fissures that occurred in 1948 near the intersection of Adams Street and Avenue 52 near the City of La Quinta are believed to have resulted from subsidence. CVWD's "Coachella Valley Water Management Plan" (November, 2000) indicates that, between 1996 and 1998, as much as 7 centimeters of subsidence occurred in the Palm Desert area. Continued overdraft of the limited groundwater resource is expected to result in declining groundwater levels, which will likely increase the rate of subsidence.

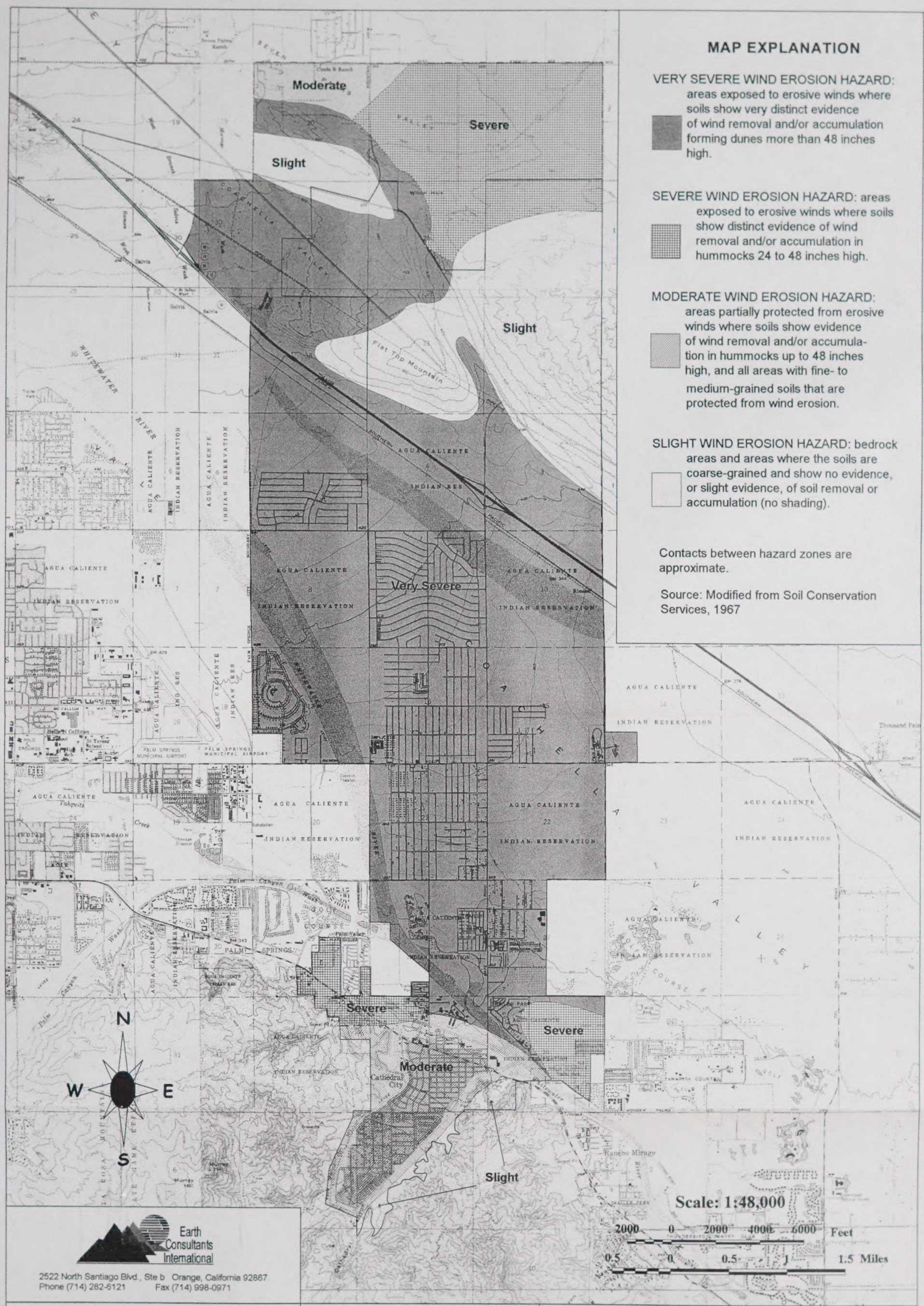
Mitigation of this hazard will require a regional approach to groundwater conservation and recharge. The U.S. Geological Survey plans to take precise elevation measurements every 2 to 3 years to determine the extent of subsidence in the eastern Coachella Valley. Continued monitoring of well water levels will also help assess the relationship between groundwater overdraft and regional subsidence. (Please refer to the Water Resources Element for more information about groundwater overdraft and recharge strategies.)

Wind Erosion

For thousands of years, strong winds emanating from the San Gorgonio Pass have been blowing and redistributing sand deposits in a southeasterly direction along the central axis of the Coachella Valley. This portion of the valley floor is largely composed of silty to sandy soils, which are easily picked up and transported by the wind. The wind erosion hazard is further compounded by the Whitewater River watershed, which crosses the most erosive zone of the valley floor. Most of the sand particles contained within the watershed are sharp and abrasive, as

they have not been rounded or smoothed by stream activity. Wind erosion is further perpetuated by urban development, especially when surface soils are disturbed and/or left unprotected.

As shown in Exhibit V-2, most of the General Plan planning area is located within a severe wind erosion hazard zone. Blowing sand constitutes a significant local environmental hazard, as it abrades and damages buildings and motor vehicles, fills drainages, driveways and yards, limits visibility on roadways, and requires substantial expense for sand removal and clean-up. Wind erosion and blowing sand also contribute to a significant health threat associated with the suspension of fine particulate matter in the air. Mitigation of this hazard has required the development and implementation of a multi-faceted mitigation plan, which includes the submittal of a dust control plan to the City prior to development. Other mitigation measures include watering of a site during construction, the installation of retaining walls and landscaping materials, and the application of chemical soil stabilizers (please refer to the Air Quality Element for more information about local and regional dust control measures).


MAP EXPLANATION
VERY SEVERE WIND EROSION HAZARD: areas exposed to erosive winds where soils show very distinct evidence of wind removal and/or accumulation forming dunes more than 48 inches high.
SEVERE WIND EROSION HAZARD: areas exposed to erosive winds where soils show distinct evidence of wind removal and/or accumulation in hummocks 24 to 48 inches high.
MODERATE WIND EROSION HAZARD: areas partially protected from erosive winds where soils show evidence of wind removal and/or accumulation in hummocks up to 48 inches high, and all areas with fine- to medium-grained soils that are protected from wind erosion.
SLIGHT WIND EROSION HAZARD: bedrock areas and areas where the soils are coarse-grained and show no evidence, or slight evidence, of soil removal or accumulation (no shading).
Contacts between hazard zones are approximate.
Source: Modified from Soil Conservation Services, 1967
Moderate
Severe
Slight
Slight
Very Severe
Severe
Severe
Moderate
Slight
N
W
E
S
Scale: 1:48,000
2000 0 2000 4000 6000 Feet
0.5 0 0.5 1 1.5 Miles
Earth Consultants International
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CATHEDRAL CITY GENERAL PLAN
BASE MAP: USGS Topographic Map Sure!RASTER MAPS
City Limits:
City SOI:
DATE: September 10, 2001
Exhibit V-2
Wind Hazard Zones in the Cathedral City General Plan Area

Regional Tectonic Setting

The City of Cathedral City is located at the northwestern extreme of the Salton Trough, a broad structural depression, which is the landward extension of the San Andreas rift zone. This spreading ridge is responsible for separating Baja California from mainland Mexico and creating the Gulf of California. As the ridge spreads, it forces the Pacific tectonic plate to move northwestwardly into the North American Plate. These plates are sliding past one another at a rate of about 50 millimeters per year, and their movement is responsible for generating the earthquakes that occur in southern California.

Approximately 70% of the movement between the Pacific and North American Plates is accommodated by the San Andreas fault. The remaining motion is distributed between the Eastern Mojave Shear Zone and several sub-parallel faults of the San Andreas fault zone, including the San Jacinto, Whittier-Elsinore, Newport-Inglewood, Palos Verdes, and several offshore faults.

Measuring Seismic Activity

The severity of an earthquake is generally classified according to its magnitude or intensity. Magnitude, a measure of the amount of energy released when a fault ruptures, is measured on the Richter scale. Each whole number step in magnitude represents a ten-fold increase in the amplitude of the waves on a seismogram and about a 31-fold increase in the amount of energy released. For example, a 7.5 Richter magnitude earthquake is about 31 times more powerful than a 6.5 Richter magnitude earthquake.

Intensity refers to a qualitative estimate of the damage caused by an earthquake at a given location and is commonly measured on the Modified Mercalli Intensity (MMI) scale. This scale includes twelve levels of intensity, ranging from I (tremor not felt) to XII (total damage) and is based upon observed damage to structures, other physical events, and human reactions to the quake. The intensity of ground shaking at a given site is a complex interaction of many factors, but of primary importance are the magnitude of the earthquake, the distance from the epicenter, the type of bedrock or soil materials between the epicenter and the site, and site-specific topographic features.

To evaluate the potential seismic hazards of a particular locale, geologists, seismologists, engineers and urban planners refer to the maximum credible earthquake (MCE) and maximum probable earthquake (MPE). The MCE is defined as the largest earthquake likely to occur on a fault or fault segment. The MPE represents the earthquake most likely to occur in a specified period of time, such as 30 or 500 years. The MCE and MPE magnitudes for a given fault are used to establish structural safety criteria and are generally estimated by seismologists based on the length of the fault, style of faulting, and other fault characteristics.

Seismic Activity in the Planning Area

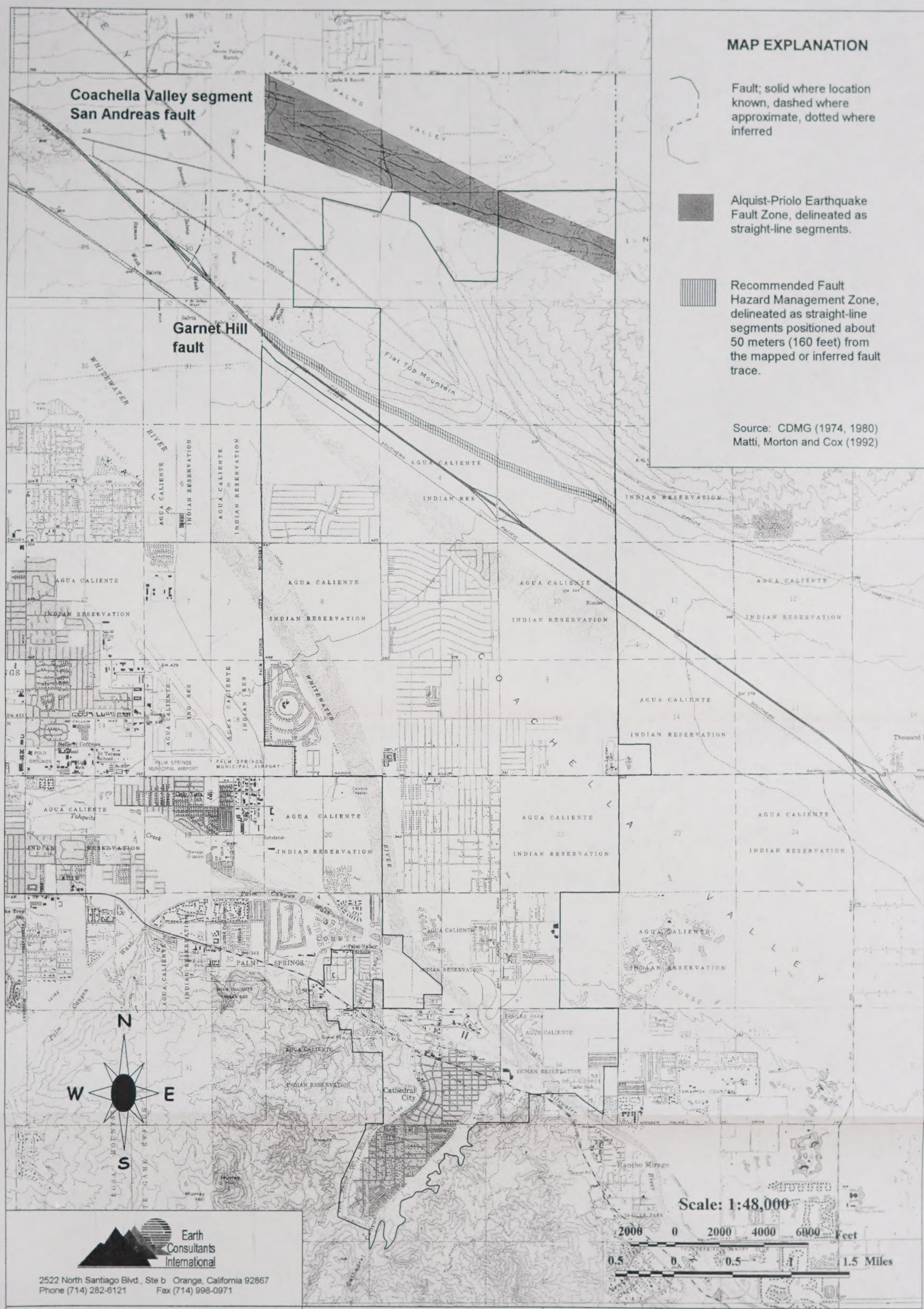
To prevent development from being built directly on the trace of an active fault, the California Alquist-Priolo Earthquake Fault Zoning Act of 1972 has defined the following terms: active, potentially active, and inactive faults. An "active" fault is one which has proven displacement of the ground surface within about the last 11,000 years (within the Holocene Epoch). A "potentially active" fault shows evidence of movement within the last 1.6 million years, although the U.S. Geological Survey has modified this time period to 750,000 years. An "inactive" fault is one which has not moved in the last 11,000 years, as determined by direct geologic evidence, such as trenching.

Several faults are capable of generating strong ground shaking in the General Plan planning area. Those capable of generating peak horizontal ground accelerations of about 0.1g and greater (Modified Mercalli Intensities greater than VII) in the planning area are listed in Table V-1 below. Faults crossing the planning area are illustrated in Exhibit V-3.

Table V-1
Potential Seismic Intensities Associated with the Maximum Credible Earthquake (MCE)

Fault Name	Distance to GP Area (miles)	Magnitude of MCE	Peak Ground Acceleration of MCE (g)*	MMI** from MCE
San Andreas				
Coachella Segment (south strand)	0 –9	7.4	0.45-0.90	X-XII
Coachella Segment (north strand)	1 – 10	7.1	0.40-0.85	X-XI
San Bernardino Mtns. Segment	4 – 11	7.3	0.35-0.80	IX-XI
East Mojave Shear				
Burnt Mountain	7 – 14	6.4	0.15-0.40	VIII-IX
Eureka Peak	9 – 16	6.4	0.15-0.30	VII-IX
Landers	20 – 28	7.3	0.15-0.25	VI-IX
Lenwood-Lockhardt-Old Woman	34 – 40	7.3	0.10-0.15	V-VIII
Camp Rock-Emerson-Copper Mtn	25 –32	6.9	0.10-0.15	V-VIII
Johnson Valley (northern)	30 – 38	6.7	0.05-0.10	V-VII
Pisgah-Bullion Mtn-Mesquite	31 – 37	7.1	0.05-0.15	V-VIII
Calico-Newberry-Hidalgo	35 – 43	7.1	0.05-0.10	IV-VIII
Helendale-S. Lockhardt	41 – 47	7.1	0.05-0.10	IV-VII
North Frontal Fault Zone	30 – 47	7.0	0.15-0.30	VIII-IX
Pinto Mountain	15 – 22	7.0	0.15-0.30	VIII-IX
San Jacinto				
Anza	17 – 24	7.2	0.20-0.25	VIII-IX
Coyote Creek	21 – 29	6.8	0.10-0.15	VI-VIII
San Jacinto (San Jacinto Valley)	25 - 29	6.9	0.10-0.15	VI-VIII
Elsinore	40 – 47	7.1	0.05-0.10	V-VII

* Peak Ground Acceleration, where g is the acceleration of gravity, equal to 9.8 m/sec^2
** MMI = Modified Mercalli Intensity
Source: Table 1-2, "Seismic, Geologic, and Flooding Sections of the Technical Background Report to the Safety Element of the General Plan for Cathedral City," prepared by Earth Consultants International, Inc., June 1999.



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TERRA NOVA®
Planning & Research, Inc.

CATHEDRAL CITY GENERAL PLAN

BASE MAP: USGS Topograghic Map Sure!RASTER MAPS

City Limits: ———
City SOI: — · · — · ·

DATE: September 10, 2001

Exhibit V-3
Faults in the Cathedral City General Plan Area

San Andreas Fault Zone

The San Andreas fault is the principal boundary between the Pacific and North American tectonic plates and controls the seismic hazard for southern California. In southern California, the San Andreas fault system is comprised of three segments:

1) Mojave Desert segment,
2) San Bernardino Mountains segment, and
3) Coachella Valley segment.

Only the Coachella Valley segment crosses the General Plan planning area. It consists of two fault strands: the San Andreas Fault strand (also known as the North Branch or Mission Creek fault) which occurs north and east of the planning area; and the Banning Fault strand (also known as the South Branch fault) which extends across the northern portion of planning area. The two strands merge southeast of the planning area, near the City of Indio, and continue southeastwardly toward the United States-Mexico border. Paleoseismic studies indicate that the last surface-rupturing earthquake on the Coachella Valley segment occurred around 1680. Prior to this, earthquakes on this fault occurred at an average recurrence interval of every 220 years. The segment is creeping at a rate of about 25 mm/year (+/-5 mm/year), and has more than a 22% probability of rupturing before the year 2024.

The Banning Fault of the Coachella Valley segment is capable of producing a magnitude 7.4 earthquake that would result in peak horizontal ground accelerations of between 0.45 and 0.9g in Cathedral City. Within the planning area, it consists of several splays that branch off from one another, then come together. In the vicinity of the Edom Hill Landfill, just east of the planning area, the fault consists of one main fault and at least three secondary splays. The Banning Fault is believed to have been responsible for generating the magnitude 5.9 North Palm Springs earthquake in 1986. Although the ground surface did not rupture during this quake, ground fractures occurred on the northern side of the fault, between Whitewater Canyon and State Highway 62.

The Mission Creek fault is capable of generating a magnitude 7.1 earthquake, with resultant peak ground accelerations of between 0.4 and 0.8g in the City. Geotechnical studies in the Desert Hot Springs area have documented several breaks that can be traced upward to within one foot of the ground surface. It is estimated that the City would be susceptible to ground accelerations greater than 1.0g during a simultaneous rupture of the Banning and Mission Creek faults.

The Coachella Valley segment joins the San Bernardino Mountains segment to the northwest of the planning area, near the northwestern limits of the City of Desert Hot Springs. The San Bernardino Mountains segment has a slip rate of about 24± mm/year (+/-5 mm/year), with an average recurrence interval of 146 years. It is estimated that this segment has a 28% probability of rupturing before year 2024.

Garnet Hill Fault

The Garnet Hill fault extends from the vicinity of Whitewater Canyon to possibly as far as Edom Hill, and crosses the planning area just north of Interstate-10. Given its orientation and proximity to the San Andreas fault, it has been suggested that the Garnet Hill fault is associated with, and

perhaps even an ancestral branch of the San Andreas fault. Although the California Division of Mines and Geology has not designated it as an active fault, the Garnet Hill fault can act as a plane of weakness and move in response to an earthquake on another nearby fault. Ground fractures associated with the 1986 North Palm Springs earthquake were reported along the trace of the Garnet Hill Fault and indicate that a near-surface response of weak surfaces occurred at depth. Although the fault is not designated an Alquist Priolo Fault Zone, the City has the option to designate a Fault Hazard Management Zone along this fault to restrict or regulate future development across the trace of the fault.

San Jacinto Fault Zone

The San Jacinto Fault Zone extends from the City of San Bernardino, southeasterly toward the Brawley area, where it continues south of the U.S./Mexico border as the Imperial Fault. The fault is south of the Planning Area. The San Jacinto Fault zone has a high level of historic seismic activity, with at least ten moderate ($6 > M > 7$) earthquakes having occurred between 1890 and 1986, and an estimated recurrence interval of between 150 and 300 years. Available data suggest that the slip rates of the fault's northern segments are about 12± mm/year (+/-6 mm/year), and slip rates of the southern segments are about 4± mm/year (+/-2 mm/year). The San Bernardino and San Jacinto Valley segments are estimated to have a 37% and 43% probability, respectively, of rupturing before the year 2024.

East Mojave Shear Zone

The East Mojave Shear Zone includes several northwest-trending faults in the southern Mojave Desert that collectively appear to be accommodating between 9% and 23% of the motion between the North American and Pacific tectonic plates. Paleoseismic studies indicate that several earthquakes have occurred in this area during the Holocene Epoch, including the 1992 Landers earthquake, which occurred on the Johnson Valley fault. A magnitude 7.3 earthquake on one of these fault segments is expected to generate a peak horizontal ground acceleration of between 0.1 and 0.15g and MMI seismic intensity of between VII and VIII in Cathedral City.

Pinto Mountain Fault

The Pinto Mountain fault is an east-trending fault that is traceable for approximately 47 miles, from its junction with the San Andreas fault eastward to just east of the City of Twentynine Palms, north of the planning area. The Pinto Mountain fault is considered active, and Holocene Epoch movement has been documented. The fault is capable of generating a maximum credible earthquake of 7.0, which would generate peak horizontal ground accelerations of between 0.15 and 0.3g in the General Plan planning area.

Seismically Induced Geotechnical Hazards

Liquefaction

Liquefaction is the total or substantial loss of shear strength of loose, sandy, saturated sediments in the presence of ground accelerations greater than 0.2g. When liquefaction occurs, the sediments involved behave like a liquid substance. This phenomenon can result in structural distress and/or failure due to settlement, the buoyant rise of buried structures, the formation of mud spouts and sand boils, and seepage of water through ground cracks.

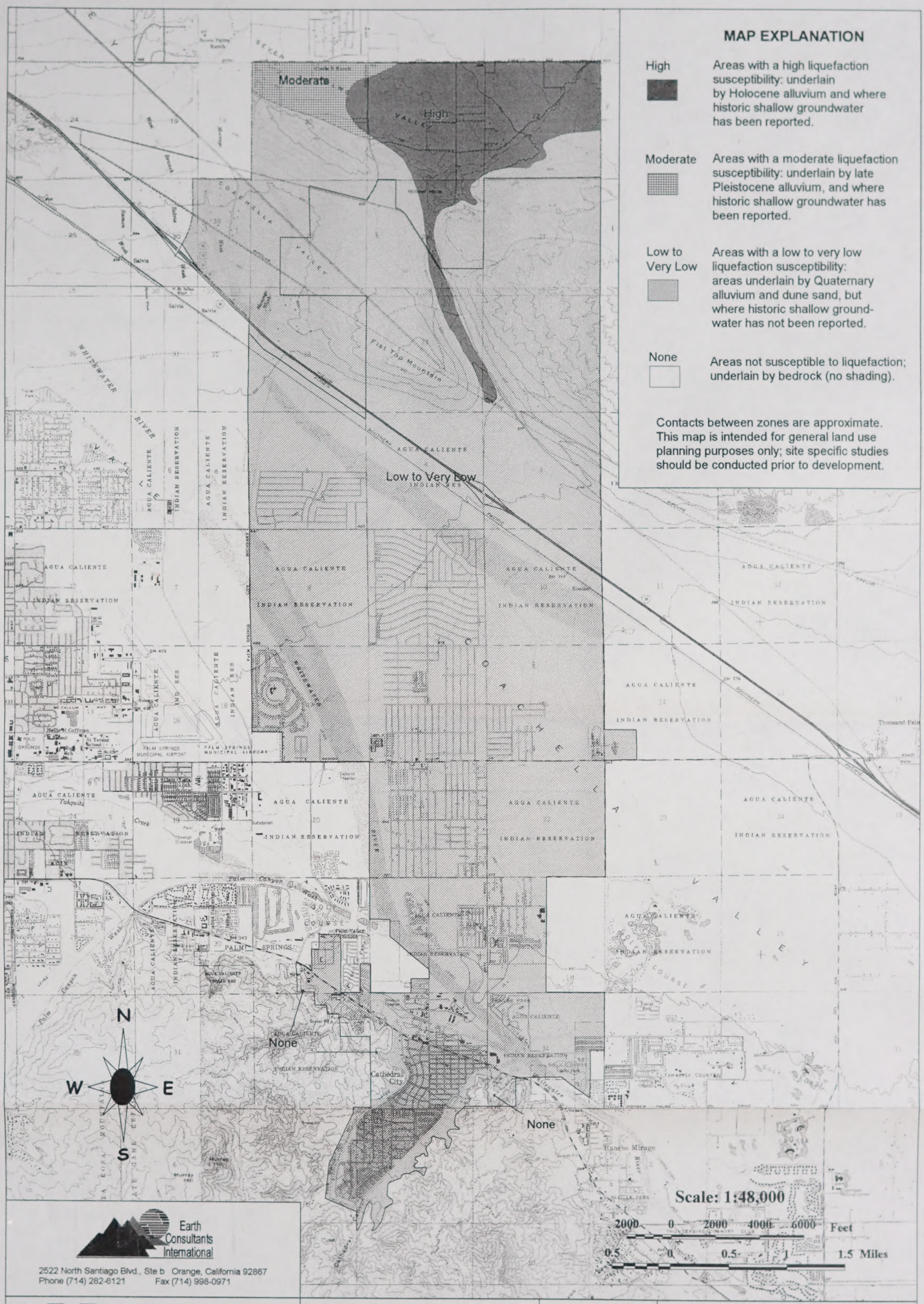
As illustrated in Exhibit V-4, the potential for liquefaction to occur is low to none throughout most of the planning area, principally because groundwater in the Cathedral City area typically occurs 150 to 200 feet below the ground surface, too deep to saturate the loose sediments of the valley floor. Although depth to groundwater may be less than 50 feet adjacent to the Santa Rosa Mountains in the southern planning area, the alluvial sediments in this area are coarse-grained sand, gravels, cobbles, and boulders that are not susceptible to liquefaction.

The potential for liquefaction is moderate to high, however, in the northern portion of the planning area, in the vicinity of the San Andreas Fault. In this area, the fault acts as a barrier to groundwater and causes groundwater to occur at shallow depths. Historically, springs and flowing wells have been observed at Willow Hole and areas just north of the planning area. During well drilling in 1981, groundwater was reported at depths of less than 30 feet northeast of Willow Hole. Given that groundwater occurs within 50 feet of the surface in this area, the unconsolidated alluvial sediments are highly susceptible to liquefaction. Shallow groundwater has also been reported along the northern side of the Banning Fault, but sediments in this area are semi-consolidated to consolidated and not susceptible to liquefaction.

Seismically Induced Settlement

Strong ground shaking can cause the densification or compaction of soils, resulting in local or regional settlement of the ground surface. Settlement can damage structures and foundations, as well as pipelines, canals, and other grade-sensitive structures. The potential for seismically induced settlement to occur is controlled by the intensity and duration of ground shaking and the density of subsurface soils.

As shown in Exhibit V-5, the valley floor, which contains loose, recently deposited sediments, is highly susceptible to this phenomenon. Development proposed in these areas should include subsurface geotechnical investigations, which evaluate the potential for seismically induced settlement. Proper foundation design and the densification or compaction of subsurface soils prior to development can mitigate some of the damaging effects associated with settlement.



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CATHEDRAL CITY GENERAL PLAN

BASE MAP: USGS Topograghic Map Sure!RASTER MAPS

City Limits: ———
City SOI: —·—·—

DATE: September 10, 2001

Exhibit V-4
Liquefaction Susceptibility Map

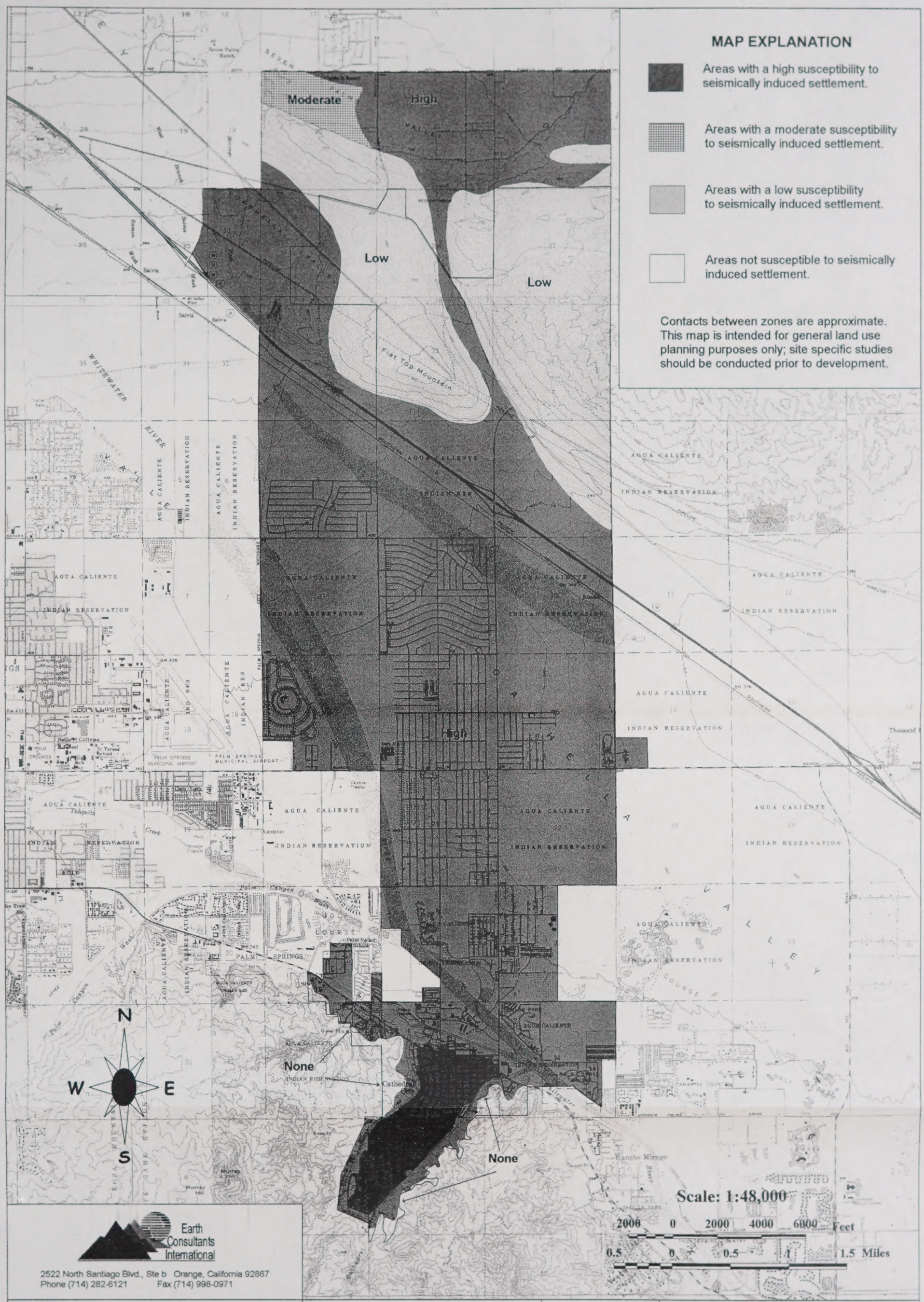

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Exhibit V-5
Areas Susceptible to Seismically Induced Settlement

Seismically Induced Slope Instability

It is estimated that a ground acceleration of at least 0.10g in steep terrain is necessary to generate earthquake-induced rock falls. Given that several faults are capable of generating peak ground accelerations of this magnitude in Cathedral City, there is a moderate to high potential for seismically induced rock falls and landslides to occur in the General Plan planning area. Susceptible areas are illustrated in Exhibit V-6, and include areas within and adjacent to the slopes of the Santa Rosa Mountains and Indio Hills, particularly where the bedrock of the Santa Rosa Mountains is intensely fractured or jointed. As shown in Exhibit V-6, nearly all of the areas with a moderate or high susceptibility to slope instability are currently undeveloped. The East and West Cathedral Canyon Washes act as a buffer between the slopes of the Santa Rosa Mountains and development in the Cove, and would be expected to absorb much of the potential damage from rock falls and provide some level of protection to existing habitable development.

Intense ground shattering can be expected at the top of Edom Hill and other narrow, steep ridges, where topographical features can localize and focus the ground shaking at the ridge top. Mitigation of these hazards can be best achieved by avoiding development on steep slopes and enforcing appropriate building setbacks at the base of the slopes. Even engineered cut and fill slopes constructed on the valley floor may be subject to failure if they are of sufficient height. These slopes must be designed to resist seismically induced failure, and their design should be based on site-specific soil stability analyses that include subsurface soil sampling and laboratory testing.

Seiches

Seiches refers to the seismically-induced oscillation or sloshing of water contained in an enclosed basin, such as a reservoir, pond, water storage tank, or swimming pool. This hazard is dependent upon the frequency of seismic waves, distance and direction from the epicenter, and design criteria of the enclosed body of water. Although damage from small bodies of water, such as swimming pools, would be expected to be minor, damage to or failure of larger bodies of water, such as water tanks and retention basins could result in the inundation of land and structures downgradient, hinder efforts to suppress fires, and limit the supply of potable water after a major earthquake.

The Desert Water Agency owns four water reservoirs, which are situated on elevated terrain surrounding the Cathedral Canyon Cove in the Santa Rosa Mountains. Damage to and/or failure of these tanks could result in inundation of homes and property in the Cove neighborhood. Two water reservoirs owned by the Coachella Valley Water District are located on Flat Top Mountain in the northern portion of the planning area. Although land downgradient from these tanks is currently vacant, their damage or failure could impact future development. Design elements, such as baffles and braces, are warranted to reduce the potential for seiches in tanks, open reservoirs, and ponds where overflow or structural failure may cause damage to nearby properties. The American Water Works Association (AWWA) Standards for Design of Steel Water Tanks includes new criteria for the seismic design of water tanks.

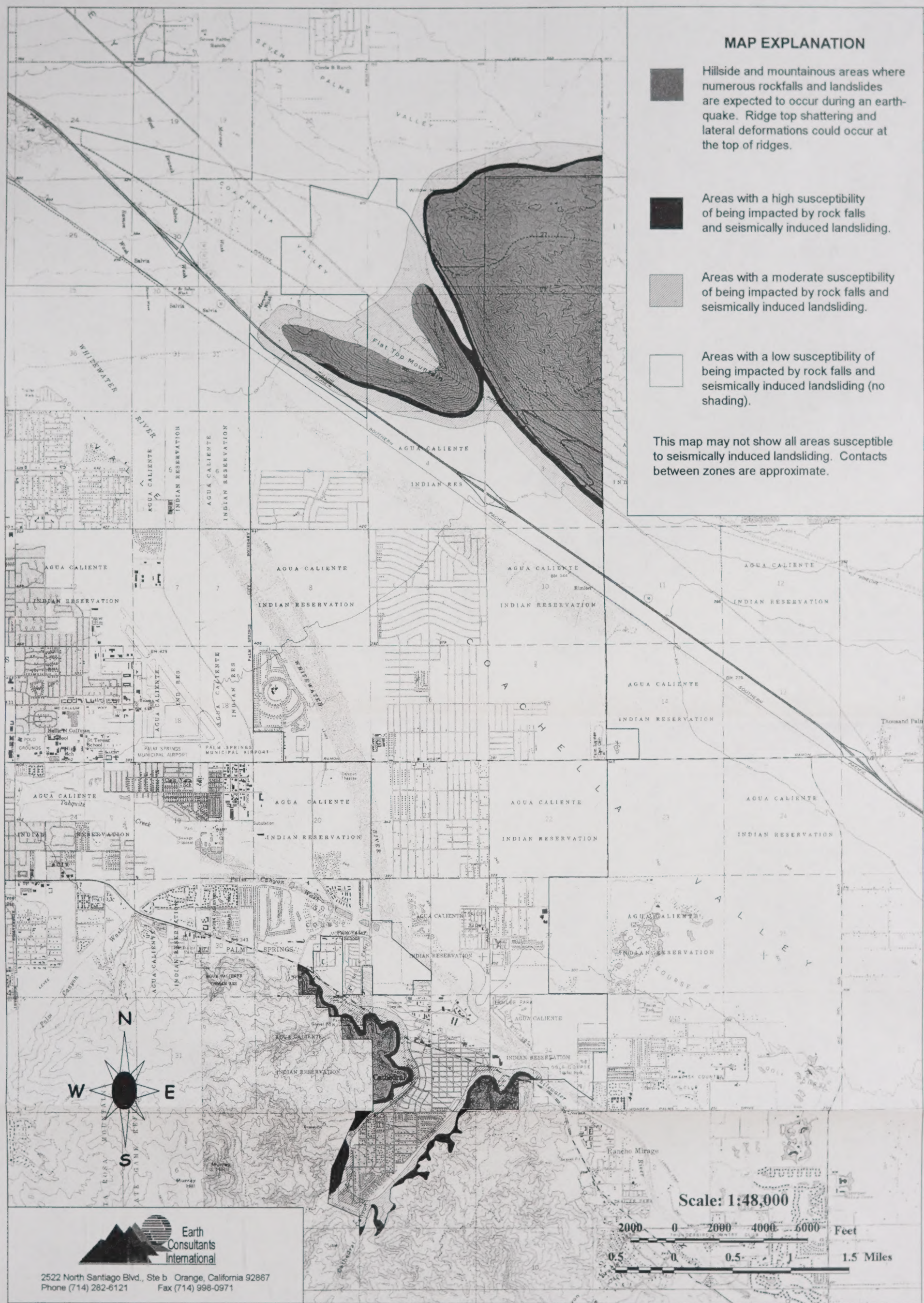

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Exhibit V-6
Areas Susceptible to Seismically Induced Slope Instability

Applicable Legislation

Alquist-Priolo Earthquake Fault Zoning Act

Perhaps the most important piece of legislation related to the mitigation of earthquake hazards is California's Alquist-Priolo Earthquake Fault Zoning Act, which was signed into law in 1972. The primary purpose of the act is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault. The Act requires the state geologist to delineate "earthquake fault zones," which show evidence of Holocene surface displacement along one or more of their segments and are clearly detectable by a trained geologist. The boundary of an earthquake fault zone is generally about 500 feet from major active faults, and 200 to 300 feet from well-defined minor faults. The Act requires cities and counties to withhold development permits for sites within an Earthquake Fault Zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

The California Division of Mines and Geology (DMG) has completed Alquist-Priolo Earthquake Fault Zone mapping for the General Plan planning area, which includes a fault zone along the Banning Branch of the San Andreas fault, as illustrated in Exhibit V-3. Although the DMG has not delineated an Alquist-Priolo Earthquake Fault Zone along the trace of the Garnet Hill fault, the City may wish to establish its own Fault Hazard Management Zone around this fault due to the possibility of ground fracture.

Uniform Building Code

The primary tool used by the City to ensure seismic safety in structures is the Uniform Building Code (UBC). The UBC describes the minimum lateral forces needed to resist seismic shaking, which are based on the area's seismic zone, type of structural system, building configuration and height, and soil profile of the structure and site in question. The San Andreas and San Jacinto faults are defined as Type A faults by the UBC. The UBC is updated roughly every three years, and was last updated in 1997. In accordance with state law, the City has adopted the most recent version of the UBC.

Until recently, three different Uniform Building Codes were used throughout the United States, each addressing the prevailing geologic conditions in different geographic sections of the country. Beginning in 1994, the International Code Committee (ICC) began consolidating the three codes into one. The new code is known as the International Building Code (IBC) and is to be used nationwide. The State of California is currently involved in efforts to modify sections of the International Building Code. Until the IBC is adopted by the State, cities and counties in California are precluded from adopting it. It is anticipated that the State and City of Cathedral City will adopt the International Building Code within the next several years, and upon adoption, it will completely replace the UBC.

California Building Code

The California Building Code (CBC) is a modified version of the UBC, which is tailored for California geologic and seismic conditions. It is included in Title 24 of the California Administrative Code and includes stringent earthquake provisions for critical structures,

including public schools and hospitals. The CBC was last amended in 1998 and adopted by the City in 1999.

Seismic Retrofitting

Most injuries and loss of life associated with earthquakes are related to the collapse of buildings and structures. Particularly hazardous buildings include unreinforced masonry (URM) buildings, wood frame structures, pre-cast concrete structures, tilt-up buildings, and mobile homes. Soft-story buildings, which lack adequate strength due to too few shear walls, may also be subject to damage or collapse.

Although the City does not maintain a seismic retrofit ordinance, it has evaluated potentially hazardous commercial structures throughout the City. In 1984, State Assembly Bill (AB) 537 required all cities in California to identify and evaluate the seismic integrity of large-occupancy commercial structures built before 1976, and to retrofit them as necessary. Given that the City of Cathedral City was not incorporated until 1982, and most commercial development in the City occurred after 1976, only a few potentially hazardous structures were identified and retrofitted. Most were located within the downtown area and have since been demolished as part of the Downtown Redevelopment project. Only one adobe commercial structure, a restaurant on Cree Road, is still standing. The structure is exempt from AB 537 due to its limited size and occupancy; however, signs have been posted at all entrances to inform patrons that the building consists of unreinforced masonry. In the early 1990s, several industrial warehouses on Perez Road were retrofitted with steel straps at the property owner's discretion.

FUTURE DIRECTIONS

Although it is impossible to prevent earthquakes and other geologic hazards from occurring, their destructive effects can be minimized. Comprehensive mitigation measures include the identification and mapping of potential hazards, prudent planning efforts, enforcement of applicable building codes, and expedient retrofitting of weak or dangerous structures. The City will also need to rely on the regulations and guidelines set forth in the Alquist-Priolo Earthquake Fault Zoning Act, State CEQA statutes, PM_{10} control plans, and the Uniform/International Building Code. The Planning Department must assure that development proposals are thoroughly evaluated with regard to geotechnical and seismic safety, and that all necessary site-specific geotechnical studies are conducted and thoroughly evaluated.

GOAL, POLICIES AND PROGRAMS

Goal

The protection of human life, structures, and land from the effects of geotechnical and seismic hazards.

Policy 1

All new development shall continue to be constructed, at a minimum, in accordance with the seismic design requirements contained in the most recently adopted edition of the Uniform Building Code/International Building Code.

Policy 2
In accordance with state law, all development proposals within designated Alquist-Priolo Earthquake Fault Zones shall be accompanied by appropriate geotechnical analyses.

Program 2.A
Secure available publications from trade organizations and the state, and distribute to developers, property owners, and other appropriate parties, which describe the content and format of geotechnical investigations that must be carried out within Alquist-Priolo Earthquake Fault Zones.
Responsible Agency: City Engineer, Building Department
Schedule: Immediately

Program 2.B
The City will pursue a cooperative agreement with the Riverside County Geologist, State Geologist, or contract geological engineer to review and determine the adequacy of geotechnical and fault hazard studies.
Responsible Agency: Planning Department, City Engineer
Schedule: Immediately

Policy 3
The City shall establish a Fault Hazard Management Zone along the Garnet Hill fault and restricting or prohibiting the construction of structures for human occupancy across the trace of the fault.

Program 3.A
The City shall establish criteria for, and require the preparation of fault hazard analyses in a manner consistent with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act.
Responsible Agency: Planning Department, City Engineer
Schedule: Upon designation of the Garnet Hill Fault Hazard Management Zone

Policy 4
The City will establish and routinely update an informational database, which describes potential seismic and other geotechnical hazards within the City boundaries and sphere-of-influence.

Program 4.A
Consult and coordinate with the California Division of Mines and Geology, other relevant state and federal agencies, and surrounding communities to establish, maintain, and update the informational database.
Responsible Agency: Planning Department, City Engineer/Consulting Geologist
Schedule: 2002-2003; Routine updating

Policy 5
Where development is proposed in areas identified as being subject to geotechnical hazards (including, but not limited to slope instability, soil collapse, liquefaction and seismically induced settlement), the City shall require the preparation of site-specific geotechnical investigations by

the applicant prior to development. All such studies shall include mitigation measures that reduce associated hazards to insignificant levels.

Policy 6
All grading, earthwork, and construction activities shall be in accordance with applicable fugitive dust control ordinances and regulations, including those established by the City, CVAG, SCAQMD, and other appropriate agencies.

Policy 7
To minimize the potential impacts of subsidence due to the extraction of groundwater, the City should actively support and participate in local and regional efforts at groundwater conservation and recharge.

Policy 8
Establish and maintain a program by which all potentially hazardous structures, including residential structures, which pose a threat due to inadequate seismic design, engineering or construction, are identified, inventoried, and rehabilitated.

Program 8.A
The City will prepare and distribute an informational handout to property owners which encourages the retrofitting of privately-owned hazardous structures, including residential structures, describes appropriate methods of rehabilitation, and suggests methods of financing such improvements.
Responsible Agency: Planning Department, Engineering Division, Building Division, Fire Department; Business License Desk
Schedule: 2003-2004

Policy 9
Coordinate with public and quasi-public agencies to assure the continued functionality of major utility systems in the event of a major earthquake.

Program 9.A
Establish working relationships with the Coachella Valley Water District, Desert Water Agency, Southern California Edison, The Gas Company, Verizon, and other appropriate agencies, to maintain strategies to safeguard major utility distribution systems and strengthen or relocate facilities that are in potentially hazardous areas.
Responsible Agency: Planning Department, Public Works Department, City Engineer, public and quasi-public agencies
Schedule: Immediate; Continuous

Program 9.B
Cooperate with CalTrans to stabilize hazardous slopes and strengthen bridges and other potentially hazardous structures along state roadways within and around the City.
Responsible Agency: Public Works Department, City Engineer, CalTrans
Schedule: Immediate; Continuous

Policy 10
To the greatest extent practical, all new septic tank leach fields, seepage pits, drainage facilities, retention basins and heavily irrigated areas shall be located away from structural foundations and supports to minimize the potential for localized collapse of soils.

Policy 11
Maintain earthquake preparedness information and proactively distribute the materials to City residents and businesses.

FLOODING AND HYDROLOGY ELEMENT

PURPOSE

The Flooding and Hydrology Element establishes the goals, policies, and programs that provide the City with protection from potential flooding hazards, thereby protecting the public health and safety of residents, businesses and visitors. The desert environment creates unique conditions relating to flood control and protection from the 100 and 500 year storm. These conditions are described below, and methods to manage or eliminate them are provided also.

The preservation of lands constrained by topography or drainage, including steep slopes, areas rich in vegetation and cover, and alluvial plains and drainage channels greatly reduce runoff and preserve the capacity of downstream facilities. Furthermore, the planned integration of on-site stormwater detention facilities, where possible and appropriate, significantly reduces the needed size of downstream facilities, while creating opportunities for groundwater recharge, and enhanced open space and/or recreation areas.

BACKGROUND

The Flooding and Hydrology Element is related to several other General Plan Elements, including the Geotechnical Element, the Hazardous and Toxic Materials Element and the Circulation Element, which address the need for, and availability of, adequate access and evacuation routes in the event of a major disaster or threat to the community. Policies and programs set forth in the Land Use Element also have some impact on flooding issues, as they direct the location of open space, essential public facilities, and developed areas, which potentially may be severely damaged by flooding.

Chapter 73 of the Statures of California, 1939, requires that adjoining jurisdictions plan for regional flood control. In addition, Government Code Section 8401(c) requires that local governments plan, adopt, and enforce flood plain management through land use restrictions when necessary. This legislation, also known as the Cobey-Alquist Flood Plain Management Act, establishes requirements for receiving state financial assistance for flood control measures. Finally, California Government Code Section 8589.5 and 65302 (g) require the mapping of areas subject to inundation in the event of dam failures.

Regional Climatic Setting

The City of Cathedral City is located in the northern Coachella Valley and is flanked by the San Jacinto and Santa Rosa mountains on the west, and the Little San Bernardino Mountains on the east.

Annual rainfall is very low from the desert floor into the foothills, ranging from 4 to 6 inches per year and averaging about 5 to 6 inches along the Little San Bernardino foothills. Summer temperatures can occasionally exceed 125°F and winter temperatures seldom fall below freezing. The mountains and upper elevations of the planning area are cooler, with an approximate 5°F drop with every 1,000-foot increase in elevation.

Rains fall in the desert generally during the months of November through March, although short-duration, high intensity storms also occur during the summer months of July through September. High intensity storms can result in too much water falling at too rapid a rate, so that the ground cannot effectively absorb the rainfall, causing sheet flooding. The benchmark storms used by the Army Corps of Engineers to determine credible storm data include the storm of 1939, which occurred over Indio on September 24th of that year, which generated 6.45 inches of rain in 6 hours. Tropical storm Kathleen, in September of 1976 also generated high rain amounts, resulting in about 3 inches of rain in Cathedral City.

Development also increases flooding hazards, insofar as more development reduces the permeable surfaces into which water can penetrate, and concentrates flows in both volume and velocity.

Local and Regional Flood Control

The generation and management of stormwater runoff are typically divided into two separate categories, local and regional drainage, which are ultimately interrelated. Local drainage is either defined by the limited size of the drainage area or to the generation of runoff and facilities capturing and conveying runoff from over a larger geographic area. Regional drainage ultimately picks up and conveys local drainage through the careful integration of these two systems.

Potential flooding problems in the City and its planning area are related to a rise in the water level of Whitewater River and its tributaries, to storm flooding on the alluvial fans, and to runoff associated with the foothills of the Santa Rosa and Little San Bernardino Mountains. Minor flooding and ponding of surface water also occurs on the relatively flat valley floor if the flood control channels draining Cathedral Canyon (the East, West and North Cathedral Channels) overflow or are unable to withstand heavy precipitation. The southern portion of the City also receives flow from Palm Canyon Wash and Tahquitz Creek to the west, and Tramview Wash to the southwest.

There are four watersheds which affect the City's flood control. Each of these is briefly described below:

I-10 North Watershed
The area north of Interstate 10, and the drainage areas which contribute to it, constitute this watershed. The watershed area is primarily undeveloped land. The Long Canyon Wash and Morongo Wash both contribute to this watershed.

The Big and Little Morongo Creeks drain the western portions of the Little San Bernardino Mountains. Big and Little Morongo Washes join south of Pierson Boulevard in Desert Hot Springs to form Morongo Wash, which enters the General Plan area as a wide braided network of washes approximately 3/4 mile wide. Flows from the Long Canyon Wash join Morongo Wash near 20th Avenue and Palm Drive about 1 mile north of the General Plan planning area. The wash flows due south and crosses I-10 and the railroad right of way, through three bridges and some small culverts, where most of the flows join the Whitewater River. Additional flows continue in a southeasterly direction between I-10 and the railroad tracks, to the Date Palm Drive overpass, where flows are forced southerly, across the railroad tracks and into the Vista Chino/Date Palm Drive intersection. Flows from the Long Canyon Wash also pass through Willow Hole, cross Date Palm Drive north of I-10, then flow between I-10 and Varner Road in a southeasterly direction to Thousand Palms and I-10, east of the planning area.

I-10 to Whitewater River Watershed

This watershed is bounded on the north by I-10, and on the west and south by the Whitewater River. This area of the City is the most rapidly growing in terms of new housing units. Levees along the Whitewater River, as well as concrete armoring on its east side, protect development to the east, in the City. Areas of special concern within this watershed includes the area bounded by McCallum Way, Avenida Maravilla, and Vista Chino; the area within the area bounded by Date Palm Drive, Ramon Road and Tortuga; the intersection of Vista Chino and Landau Boulevard; Dinah Shore Drive between Date Palm and Cathedral Canyon; and Gerald Ford at Plumley, where poorly defined drainage areas cause nuisance flows. Most flood water in this watershed is conveyed on existing City streets.

Eagle Canyon Watershed

This watershed is located west of the West Cathedral Canyon Channel, and south of Palm Canyon Wash. Eagle Canyon and a number of other mountain drainages are the primary source of flood waters in this watershed. The Eagle Canyon flows cross developed areas before discharging into the Cathedral Canyon North Channel. A dam has been planned for Eagle Canyon to control flooding, but has not been constructed. Preliminary engineering and right of way studies have been completed. The Flood Control District has budgeted funds for additional studies and engineering in this area.

Cove Area Watershed

This watershed is bounded by the Cathedral Canyon Channel East and West, and the Whitewater River. The East and West channels convey flood waters on either side of the Cove, and discharge into the Whitewater River. A number of culverts have been constructed through the channel levees to convey flows from the Cove to the channels. The streets generally have no curb and gutter, and are not sufficient, therefore, to contain the 100 year storm.

Regional Flood Control: the Coachella Valley Water District and the Riverside County Flood Control District

The Coachella Valley Water District (CVWD) and the Riverside County Flood Control District are responsible for the management of regional drainage within and in the vicinity of Cathedral City, including rivers, major streams and their tributaries, and areas of significant sheet flooding.

Both Districts are empowered with broad management functions, including flood control planning and construction of drainage improvements for regional flood control facilities, as well as watershed and watercourse protection related to those facilities. To carry out their mandates, the Districts also have powers of taxation, bonded indebtedness, land and water rights acquisition, and cooperative partnerships with local, state, and federal agencies. An elected Board acts as the official decision-making body of CVWD, while the Riverside County Board of Supervisors is the official decision-making body of that District.

Cathedral City Regulation of Local Drainage

While CVWD and the County have the primary responsibility for regional facilities, in close cooperation and coordination with the City, it is the City that remains directly responsible for the management of local drainage. The effectiveness with which the City and Districts manage drainage issues will have a direct effect on the scale, complexity and cost of future flood control facilities. The cost-effectiveness of prevention and on-site management should be actively integrated into community land use planning and regulation, recognizing significant physical and financial constraints in many areas of the city.

FEMA and the Federal Flood Rate Maps

The Federal Emergency Management Agency maps areas of significant potential flooding for the City and its planning area. The FEMA Flood Insurance Rate Maps (FIRMs) serve as the basis for determining the need for and availability of federal flood insurance. Exhibit V-7 is a compilation of the data presented in three FIRM Community Panels (maps) currently dated July, 1999. Each of the applicable flood zones is briefly described below.

A: Areas of 100-year flood: base flood elevations have not been determined.
AE: Areas of 100-year flood inundation; base flood elevations not determined.
AF: Floodway areas in Zone AE (mostly contained by levees).
A?: Estimated continuation of Zone A not mapped by FEMA.
X: Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas of less than 1 square mile; and areas protected by levees from 100-year flood.
None: Areas determined to be outside 500-year flood plain or where flood hazards are undetermined.

MAP EXPLANATION

- Zone A — Areas of 100-year flood inundation; base flood elevations not determined
- Zone AE — Areas of 100-year flood inundation; base flood elevations determined
- Zone AO — Flood depths of 1-3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- Zone X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage area of less than 1 square mile; and areas protected by levees from 100-year flood.
- Zone A? — Estimated continuation of Zone A not mapped by FEMA.
- None — Areas determined to be outside 500-year flood plain or where flood hazards are undetermined.

Source: Federal Emergency Management Agency (FEMA), 1999

- ● Above-ground water reservoirs in the General Plan Area owned by the Desert Water Agency.
- ■ Above-ground water reservoirs in the General Plan Area owned by the Coachella Valley Water District.

Whitewater River

North Cathedral Channel

Tramview Wash

West Cathedral Channel

East Cathedral Channel

N W E S

Scale: 1:48,000

2000 0 2000 4000 6000 Feet

0.5 0 0.5 1 1.5 Miles

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Exhibit V-7
Flood Zones in the Planning Area

The FEMA maps for the City of Cathedral City planning area designate lands within the 100-year flood plain (Zone A). These areas include washes, channels and areas subject to sheet flow flooding. The maps do not cover the northern portion of the General Plan area and some of the Agua Caliente tribal lands within the City limits.

The FEMA maps show that the 100-year flood zone for the Whitewater River is generally confined to the area along the channel of the river and its tributaries.

Areas of 100-year flood inundation also occur locally in Cathedral Cove. The 500-year flood limits cover a large portion of the central portion of the City, and the older residential and commercial section in Cathedral Cove. Most of East Palm Canyon within the City limits is located within the 500-year inundation area.

Flooding in the planning area consists primarily of shallow flooding associated with Morongo Wash and the West branch of Salvia Wash. A significant amount of flow also emanates from the Long Canyon wash, which separates Edom Hill from Flat Top Mountain, in the Willow Hole area. Because of the confined nature of this canyon, floodwaters in these areas move at relatively high velocities, with potential to do considerable damage.

Significant improvements in the northern portion of Cathedral City have been proposed by the Coachella Valley Water District. Amendments have not yet been approved by FEMA, but CVWD expects that these proposed changes, when implemented, will reduce the flooding hazard in this area.

Cathedral City Comprehensive Storm Drain Master Plan

The current Cathedral City Comprehensive Storm Drain Master Plan, prepared in March, 1990, is a strategy for the construction, maintenance and funding of storm drainage improvements in the City for all four watersheds. The Plan analysis includes coordination with the plans of other agencies having jurisdiction, including the Riverside County Flood Control District and CVWD. Ultimately, the coordinated development of the City's Plan and those of the two District will result in a comprehensive approach to the protection of property in the City from flood waters.

The Master Plan has been implemented by the Master Drainage Plan ordinance and serves as the operational tool for technical guidelines and developer requirements regarding site retention or installation specifics. Financial plans for City sponsored projects, however, have not been implemented.

Backbone Drainage Systems

Capital projects such as dikes, levees, channels, and debris and detention/retention basins have been constructed to manage project-specific, community and regional drainage systems in the community. Designing, financing and constructing these facilities are significant challenges and important opportunities. Methods of flood controls and their costs are weighed against the economic impacts likely to result from major flooding, in some areas, flood control

improvements are frequently necessitated by development itself, which creates its own runoff management problems.

Whitewater River Channel
The Whitewater River Channel is the main drainage facility in the city and the Coachella Valley. At Cathedral City, the Whitewater River drains approximately 720 square miles, and generates a 100-year storm discharge of approximately 37,000 cfs and a standard project discharge of approximately 78,000 cfs. The Coachella Valley Water District is continuing its program of channel revetment (concrete armoring of channel walls) to protect the channel from stormwater erosion.

Cathedral Canyon Channel
The Cathedral Canyon Channel originates at the City's western corporate limit, near Golf Club Drive, and flows from west to east, draining into the Whitewater River at the City's eastern City limit.

East Cathedral Canyon Channel
The East Cathedral Canyon Channel flows eastbound along the Cove area directly into the Whitewater River. Portions of the channel, which were originally lined by the County prior the City's incorporation, have recently (1999) been revetted by the City at East Palm Canyon Drive.

West Cathedral Canyon Channel
The West Cathedral Canyon Channel flows along the west boundary of the Cove area, slowing from south to north and feeds into the Cathedral Canyon Channel. The Channel is under the jurisdiction of the Riverside County Flood Control District.

Areas in the City that have received flood control improvements are those subject to potentially destructive floods with a probable frequency of at least once every 100 years (100-year flood). Significant capital investments have been made in the community where these threats occur, including the revetment discussed above. Improvements have been completed over a long period of time, and in the case of the West and East Cathedral Canyon Channels, date back to 1950.

Mid-Valley Stormwater Channel

The Mid-Valley Channel is a regional flood control facility, planned as a concrete-lined trapezoidal channel along the foot of the northeastern facing slopes of the Palm Springs Sand Ridge. The Coachella Valley Water District has completed the planning and design of the project. The channel will have a sandy bottom wherever possible to enhance percolation of runoff.

The proposed channel route will begin southeast of a retired landfill and septic tank disposal field located at the northern extension of DaVall Drive, and will flow to Avenue 42 in Indio between Washington Street and Country Club Drive.

The "benefit area" portion of the City of Cathedral City is limited to the area south of the Southern Pacific Railroad, east of Date Palm Drive, north of Ramon Road and west of the city limits at DaVall Drive.

Specific Plan No. 89-40, which was approved by the City Council in April, 1990, requires the provision of drainage easement to allow runoff to feed into the Mid-Valley Channel. The Specific Plan provides a combination retention area/park site of approximately 15 acres to be located at the eastern extreme of the planning area adjacent to the Southern Pacific right-of-way.

The Mid-Valley project area is not identified as a flood hazard zone by the Federal Emergency Management Agency (FEMA). However, analysis prepared by Bechtel Engineering for CVWD indicates that development in the project area, without the benefit of the 100-year on-site retention, would generate a storm discharge of 4,827 cfs (cubic feet per second) in the vicinity of Ramon Road east of the City, and 7,201 cfs at Monterey Avenue in Palm Desert. Storm discharge at the Coachella Valley Channel in La Quinta would total 20,837 cfs, indicating the potential for the drainage area to generate significant stormwater runoff once development occurs.

Testifying to the effectiveness of the City's 100-year storm retention program for new development in the project area, mitigation is expected to reduce the 100-year Stormwater discharge at Ramon Road to 1,280 cfs, Monterey Avenue to 1,426 cfs, and Coachella Valley Channel to 12,690 cfs.

A proposed addition to the Mid-Valley Channel would pick up portions of the Morongo Wash drainage in the northeast sphere, north and south of I-10, as part of the Cathedral City Comprehensive Storm Drain Master Plan.

Local Drainages and Facilities

Local drainages can pose a significant flood hazard to existing and future development in the City. These include the Eagle Canyon wash and several unnamed washes on the southern end of the City, which contribute to localized flooding along the East Palm Canyon corridor.

Currently (2001), only two true storm drains exist in the City. A small storm drain is located at Landau Boulevard and Ramon Road, which feeds into the Whitewater River. The other, Line 1, is located southeast of Rio del Sol, and is about 1/3 completed. The City's Storm Drain Master Plan includes a number of detention and retention basins, storm drain pipelines south of I-10 and north of the Whitewater River, an Eagle Canyon debris basin, and several improvements in the Cove. The City, CVWD and the Union Pacific Railroad are also working on the design of a railroad bridge and Mogongo Levee, south of interstate 10, which will remove a large portion of lands currently in flood zone "A" from the flood hazard north of Verona Road.

The Cathedral City Comprehensive Storm Drain Master Plan (1990) presents proposed drainage systems, conceptual design and cost estimates and financial analysis for funding techniques for future implementation.

Land Use and Flood Control

Thoughtful and appropriate land use planning and development is one of the most effective and direct methods of controlling flooding and limiting threats to lives and property. Consistent with other primary goals of the community, land use planning can call for the preservation of natural vegetation in the foothills and mountains, which function as natural water sheds for local drainage and ground water recharge, and can affect the volume of stormwater and debris that reach downstream facilities.

Land use decisions also impact the potential for damage to property, and injury to people in the City. The analysis of development proposals to determine the appropriate type and location of structures near major drainages and in areas subject to sheet flooding can reduce or eliminate damage or injury. Development should be strictly regulated, and should include prohibitions on the construction of structures for human habitation within drainage areas. Protection measures may include raising the finished floor level about the flood depth projected for the surrounding area and providing protection against scouring. Until such time as flood protection is provided which removes areas from threats of flooding, development in these areas must be carefully regulated and designed to FEMA standards.

Wildlife Habitat and Recreation in Flood Control Facilities

Stormwater facilities can also be viewed as an opportunity for multiple uses, including recreation and wildlife habitat. Washes, detention/retention basins and channels should be designed to capitalize on the open space and recreational opportunities they represent. In addition to integrating hiking and equestrian trails into these facilities, these areas can offer meaningful areas for passive enjoyment and habitat for a broad variety of desert animals and plants. They can also serve as an effective buffer between the built and natural environment, and provide open spaces for neighborhoods (please also see the Community Image and Urban Design Element).

NPDES Program -- National Pollution Discharge Elimination System

The Clean Water Act of 1972 set goals to restore and maintain water quality by reducing "point source pollution" such as pollutants from industry and sewage treatment facilities. In 1987, amendments to the Act shifted focus to polluted runoff, requiring states to reduce discharges into our waterways. These amendments required the US Environmental Protection Agency (EPA) to formally regulate polluted runoff just as it regulates industry and sewage treatment plants - with permits under the National Pollutant Discharge Elimination System (NPDES). The NPDES program requires communities with populations exceeding 100,000 to apply for a municipal permit. Municipal permits require cities and counties to eliminate or control "non-point source pollution."

In most states, including California, the state administers the NPDES permitting program, rather than the EPA. Nine Regional Water Quality Control Boards administer the program for California. Portions of Riverside County fall under the jurisdiction of three of these Boards: the Santa Ana, the San Diego, and the Colorado River Basin Regional Water Quality Control Boards.

Recognizing that this regulation would affect them all, the Flood Control and Water Conservation District, the County of Riverside, the 23 Riverside County cities and the Coachella Valley Water District joined forces to apply for joint NPDES municipal permits, rather than separate ones. This has allowed the "co-permittees" to share resources, eliminate duplicate efforts, and minimize program costs to the public.

The District's service area includes portions of three major river basins: the Santa Ana, the Santa Margarita and the Whitewater, of which the City of Cathedral City is a part. The Colorado River Regional Board has issued an NPDES municipal stormwater permit to the District and its respective co-permittees, including Cathedral City.

The program emphasizes pollution prevention, control measure activities, utilization of existing resources and programs, and coordination with regional and state compliance activities. The goals of these activities include the following:

- Eliminate illicit connections and illegal discharges to the storm drain system;
- Promote public awareness and participation through the Program's education program - The StormWater/CleanWater Protection Program;
- Identify and control stormwater pollution created by industrial and commercial activities;
- Establish stormwater management programs for public agencies to reduce the amount of pollutants that enter and accumulate in storm drains;
- Identify and establish local regulatory control measures for activities that can pollute the storm drain system, such as new development and construction, and residential, commercial and industrial activities;
- Monitor wet and dry weather flows to identify the origin, types, and concentrations of non-point source pollutants;

- Increase existing municipal efforts to clean streets, collect solid waste, and prevent used oil and other hazardous wastes from entering storm drains;
- Develop local ordinances to establish legal authority for cities and counties to regulate stormwater discharges.

FUTURE DIRECTIONS

The enforcement and implementation of regional and City Master Drainage Plans will ultimately represent the primary tools for the City in implementing the goals, policies and programs contained herein. The improvement contained in the Master Plans will control the regional drainage pattern so that it can be better managed. The Master Drainage Plans will also impact the potential for development in areas subject to flooding. It is also important that regulations contained in the Municipal Code, including the Zoning Ordinance and Public Works standards, reflect the programs and projects included in the Master Plans.

GOAL, POLICIES AND PROGRAMS

Goal

The provision of adequate facilities to protect lives and property from local and regional flooding hazards.

Policy 1
Maintain a Master Plan of Drainage which is updated to reflect the changing needs of the City.

Program1.A
Local regulations and guidelines shall be established which are consistent with the Master Plan of Drainage, direct the management of runoff, and provide for local drainage facilities which support the effective use of regional facilities.
Responsible Agencies: Public Works Department; City Engineer
Schedule: Continuous

Program 1.B
Monitor and periodically update the Master Plan of Drainage to reflect changes in local and regional drainage and flood conditions.
Responsible Agencies: Public Works Department; City Engineer
Schedule: Continuous

Policy 2
Major drainage facilities shall be designed to maximize their use as multi-purpose recreational or open space sites, consistent with the functional requirements of these facilities.

Program 2.A
Coordinate and cooperate with responsible regional agencies in achieving multi-use agreements within flood control channels and designing safe, attractive recreational facilities which maintain the functional requirements of the drainage facilities.
Responsible Agencies: Public Works Department; Planning Department; CVWD, RCFCD
Schedule: Continuous

Program 2.B
Work closely with responsible agencies to design drainage and flood control facilities that minimize negative aesthetic impacts and retain natural groundcover and vegetation to the greatest extent possible.
Responsible Agencies: Public Works Department; Planning Department; CVWD; RCFCD
Schedule: Continuous

Policy 3
Continue to actively participate in regional flood control and drainage improvement efforts and to develop and implement mutually beneficial drainage plans.

Policy 4
The City shall cooperate in securing FEMA map amendments for projects as they occur.

Program 4.A
The City shall coordinate and cooperate in the filing of appropriate FEMA application materials to secure amendments to the Flood Insurance Rate Maps for the City, consistent with existing and proposed improvements.
Responsible Agencies: Public Works Department; City Engineer; CVWD; RCFCD
Schedule: Continuous

Policy 5
Pursue all credible sources of funding for local and regional drainage improvements needed for adequate flood control protection.

Program 5.A
Consider the establishment of Area Drainage Plans or Assessment Districts to fund drainage improvements.
Responsible Agencies: Public Works Department; City Engineer
Schedule: Continuous

Program 5.B
Explore and pursue County funding, state funding under the Cobey-Alquist Flood Plain Management Act, other State programs, and federal funding options for local and area-wide flood control projects.
Responsible Agencies: Public Works Department; City Engineer
Schedule: Continuous

Policy 6
All new development shall be required to incorporated adequate flood mitigation measures, such as grading that prevents adverse drainage impacts to adjacent properties, on-site retention of runoff, and the adequate siting and sizing of structures located within flood plains.

Program 6.A
Stormwater retention for the 100 year storm shall be enforced through the development review process and routine site inspection.
Responsible Agencies: Public Works Department; Planning Department
Schedule: Continuous

Policy 7
Assure that adequate, safe, all-weather crossings over flood control channels are provided where necessary, and are maintained for passage during major storm events whenever possible.

Policy 8
Investigate the need for the construction of curbs and gutters in neighborhoods lacking sufficient street drainage improvements.

Policy 9
Critical health and safety facilities shall not be located within the 100-year flood plain unless flood-proofing or other mitigation measures are implemented.

Program 9.A
The Land Use Map and Zoning regulations shall prohibit the construction of critical facilities within the 100-year flood plain unless flood-proofing or other mitigation measures are implemented, and shall only permit residential development if adequate flood-proofing measures have been implemented.
Responsible Agencies: Planning Department; Public Works Department
Schedule: Continuous

NOISE ELEMENT

PURPOSE

The purpose of the Noise Element is to coordinate the community's land uses with the existing and future noise environment, and to design measures intended to minimize or avoid community exporsure to excessive noise levels. As the City grows, so does the potential for land use conflicts which can result in an unacceptable noise environment. Through the implementation of the policies and programs in this Element, current and future noise impacts can be greatly reduced or avoided entirely.

BACKGROUND

The Noise Element is directly related to the Land Use and Circulation Elements. It also has a direct relationship with the Economic and Fiscal Element, since low noise levels are a fundamental characteristic of a resort residential community, and the City's relatively quiet, peaceful atmosphere can be considered a major community asset.

The noise environment can have a significant influence on the health and comfort of the community. In general, the noise levels in Cathedral City's residential neighborhoods are average, typical of quiet rural areas. Motor vehicles are the major source of continuous, excessive noise in the City. Primary noise generators include traffic on Interstate-10, East Palm Canyon Drive, Date Palm Drive, Vista Chino, and Ramon Road. Freight rail service along the Southern Pacific Railroad, parallel to I-10, is also responsible for generating excessive noise. High noise levels resulting from commercial aviation at the Palm Springs Regional Airport also occasionally have an intrusive impact on the community's noise environment. However, recently completed expansion of airport runways to the northwest is expected to reduce airport noise exposure in Cathedral City to acceptable levels. Other noise generators include construction activities, industrial operations, lawnmowers, and home appliances. Sensitive receptors within the planning area include schools, a library, and a medical facility.

Issues to be addressed in the Noise Element are identified in subsection (f) of the California Government Code Section 65032, which requires that the Noise Element define and evaluate the community's noise problems. Section 21083.1 of the California Environmental Quality Act (CEQA) requires the adherence to the State Guidelines and allows cities to determine whether a development project will have a "significant effect on the environment," ranging from traffic noise in a residential neighborhood to unacceptable noise generated by the equipment at a commercial shopping center. The State requires the adoption of a noise control ordinance be for the resolution of local noise complaints.

The California Department of Health Services has prepared a Model Community Noise Control Ordinance as a model for use by local jurisdictions. The City of Cathedral City has such an ordinance in place (Chapter 11.96 of the City Municipal Code).

Community Noise Equivalent Level

The definition of Noise is unwanted or undesired sound. The combination of noise from all sources near and far is known as the Ambient Noise Level. A very sudden change in air pressure from the immediate "normal" atmospheric pressure results in airborne sound. For purposes of this discussion, the ambient noise level at a give location is termed "environmental noise".

In order to understand environmental noise, some familiarly with the physical description of noise is necessary. Frequency range, intensity/loudness and temporal/time-varying aspects are the primary physical characteristics of sound. The decibel (dB), A-weighted level (dBA), and Community Noise Equivalency Level (CNEL) are all used to describe and numerically weigh noise. Each of these measurement scales are briefly described below.

The decibel is the unit of measurement describing the amplitude, or strength of sound. The A-weighted decibel approximates the subjective response of the ear to a noise source by discriminating against the very low and very high frequencies in the spectrum. The Community Noise Equivalent Level (CNEL) is the average of the intensity of a sound over a 24 hour period, with corrections for time of day. The time of day corrections results in the addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m., and the addition of 10 decibels to sound levels at night between 10 p.m. and 7 a.m. It is necessary to make these adjustments because of the decrease in background noise levels during the evening and night hours when compared to daytime hours. People are therefore more sensitive to noise during these times, and sounds are weighted accordingly. During evening and night hours, tolerable noise levels should be 5 to 10 dBA lower, and the CNEL number is weighted accordingly.

Ranges and Consequences of Noise

Noise sources are classified as either "line source" (a busy street) or "point source" (a commercial compressor). A number of factors affect the noise as it travels through the air, including temperature, wind speed and direction, hard and soft ground surfaces, and landscaping and walls. This is particularly important when considering the noise generated by a roadway, insofar as these factors can mitigate or intensify the noise level.

Normal conversation is roughly 55 dB at five feet of separation, whereas a loud engine noise is about 100 dB. Most everyday sounds occur in the range of 40 to 100 dB. Doubling the sound energy of a noise source only increases the decibel rating by 3 dB, due to the logarithmic nature of the sound measuring (decibel) scale; however, because of the internal mechanism of the human ear and how it receives and processes noise, a sound must be nearly 10 dB higher than another sound to be considered twice as loud. High noise levels can affect everything from property values and economic productivity to psychological health.

When there is an increase in the difference between background or ambient noise and the noise generated from a particularly intrusive source such as, traffic, a barking dog, aircraft or industrial operations, adverse reactions to noise generally intensify. Noise control measures should reduce noise by 5 to 10 dBA in most circumstances to effectively lower the perceived sound. Loud, short duration noises from barking dogs and low-flying aircraft, for example, therefore generally have little impact upon the CNEL levels, because of the averaging techniques used in this measuring technique.

The Existing Cathedral City Noise Environment

Motor vehicle traffic in the City of Cathedral City is the primary source of noise. Aircraft traffic also contributes negatively to the noise environment, to a smaller but occasionally significant extent. Also, the northern portion of the City and the Sphere-of-Influence are substantially impacted by the U.S. Interstate-10/Southern Pacific Railroad corridor. Other sources of community noise include mechanical equipment serving commercial and industrial land uses.

Motor Vehicle Noise

Vehicular traffic, including automobiles, trucks, buses, and motorcycles, is the major noise source measured (2001) within the City. Cars generate noise from engine vibration, the interaction of tires and the roadway, and the exhaust system. Noise produced by traffic fluctuates in relation to its volume, the percentage of trucks, and the average speed. Table V-2 lists the existing noise levels at several locations. The table also shows the anticipated noise levels at General Plan buildout.

Interstate-10 and Southern Pacific Railroad Lines

In addition to traffic along Highway 111 and the other major arterial roadways impacting the City, both incorporated and sphere areas are impacted by rail and vehicular traffic associated with the Southern Pacific Railroad line and U.S. Interstate-10, respectively. The passage of trains, although an intrusive noise event, occurs only periodically and with limited duration. More significant is the influence of Interstate-10 traffic noise, which increases at night due to persistent truck volumes combined with an atmospheric nighttime temperature inversion. This inversion tends to reduce the acoustic attenuation typical of distance over open terrain, making noises seem louder. Train traffic currently (2001) results in 40 trains per day through the planning area, with an average of 80 cars per train, and a train length of 5,200 feet.

On a CNEL basis, the calculated combined impacts associated with 2001 Interstate-10 and Southern Pacific railroad traffic place the 59.7 dB and 75.1 dB contours at 800 feet and 100 feet south of the railroad lines, respectively. The 65 CNEL contour is approximately 430 feet from the tracks and the 60 CNEL contour about 770 feet from the tracks.

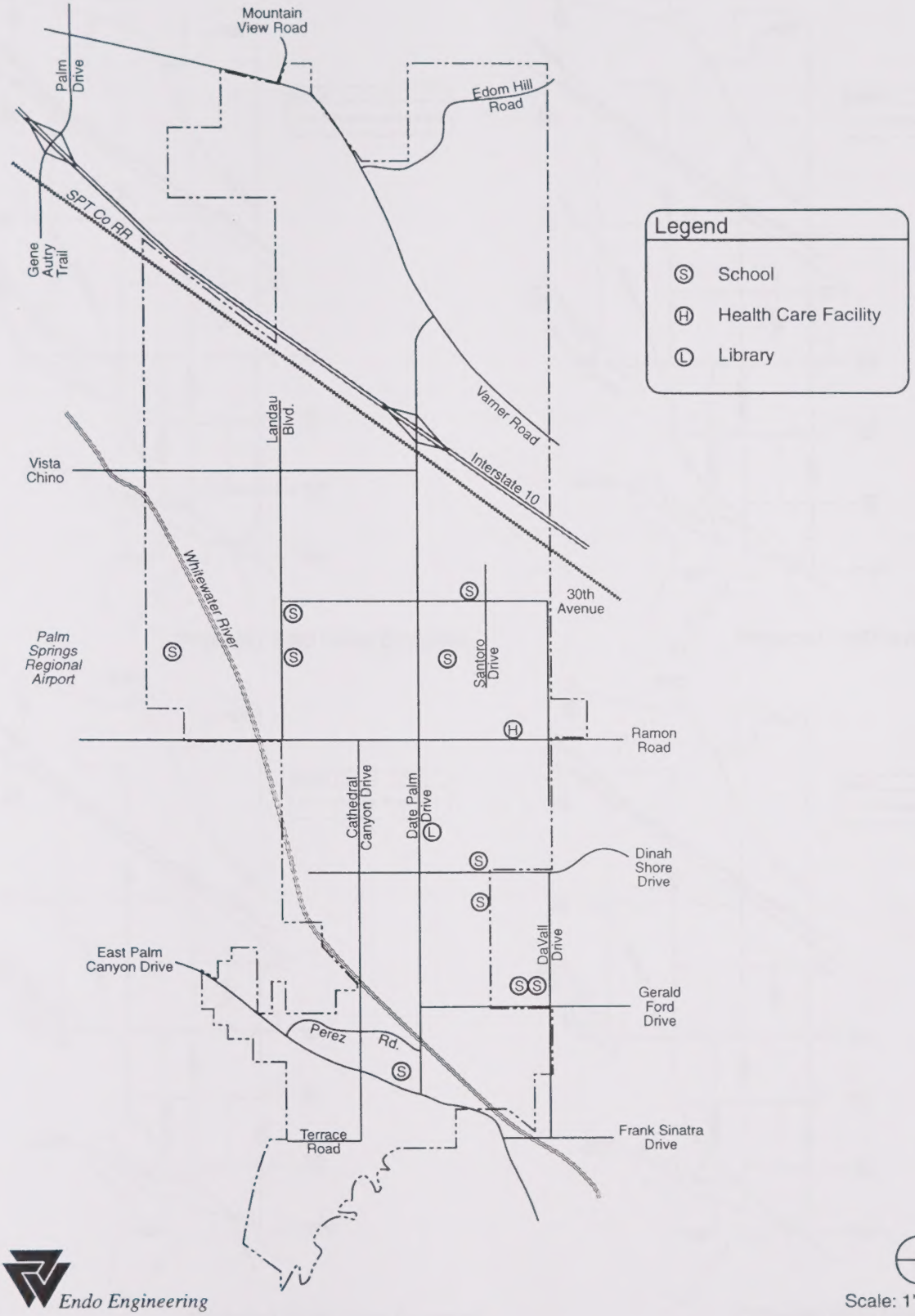
Aircraft Noise

Aircraft noises impacting the community come from commercial and general aviation operations at the Palm Springs Regional Airport, located west of the City Limits. The updated Airport Master Plan and Part 150 Noise Compatibility Study evaluated airport operations, monitored portions of the noise environment, and projected future noise impacts from planned expansions and increased operations. The flight tracks, or patterns, that aircraft are assumed to follow in the abovementioned noise study indicate limited overflights in Cathedral City.

For year 1993 conditions, the peak season 65 CNEL noise contour extended into Cathedral City, primarily between Ramon Road and Dinah Shore Drive, just past Cathedral Canyon Drive (Exhibit V-9). A review of the noise sensitive receptor locations points out the potential for current peak season aircraft noise impacts to existing residential receptors, but does not indicate existing noise impacts to any schools, libraries, or health care facilities.

With the mandated changes to the noise standards for jet aircraft, the noise contours for 1999 conditions are substantially smaller (Exhibit V-9). The peak season 65 CNEL noise contour will remain entirely within the City of Palm Springs, stopping short of the intersection of Sunny Dunes Road and San Luis Rey Drive, without any change to the operation of the airport (other than necessary to meet increased demand).

The Palm Springs Regional Airport noise contours to the south will decrease substantially with the recently completed runway 13R-31L extension being 1,500 feet to the northwest. The runway extension to the north will move the average location of the take-off and landing operations northerly, away from Cathedral City. The peak season 65 CNEL noise contours for 2005 and 2025 are projected to remain entirely within Palm Springs.

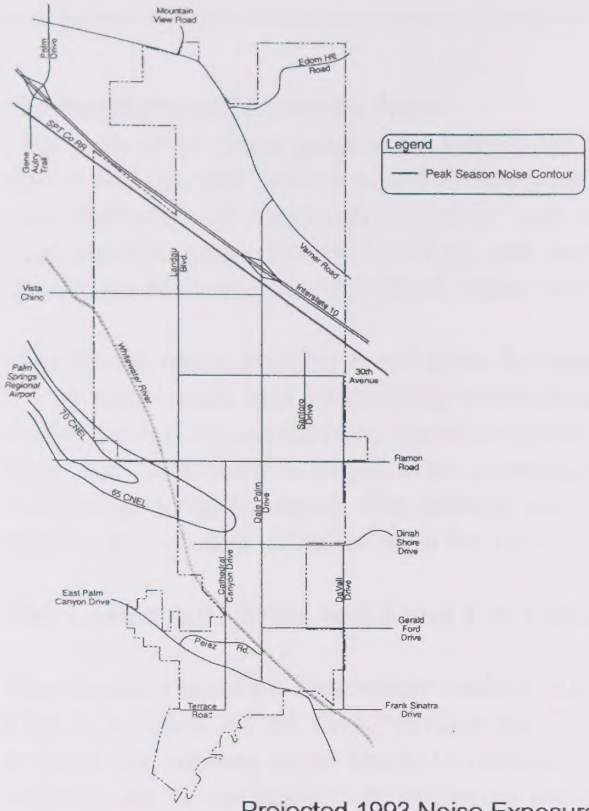


TERRA NOVA®
Planning & Research, Inc.

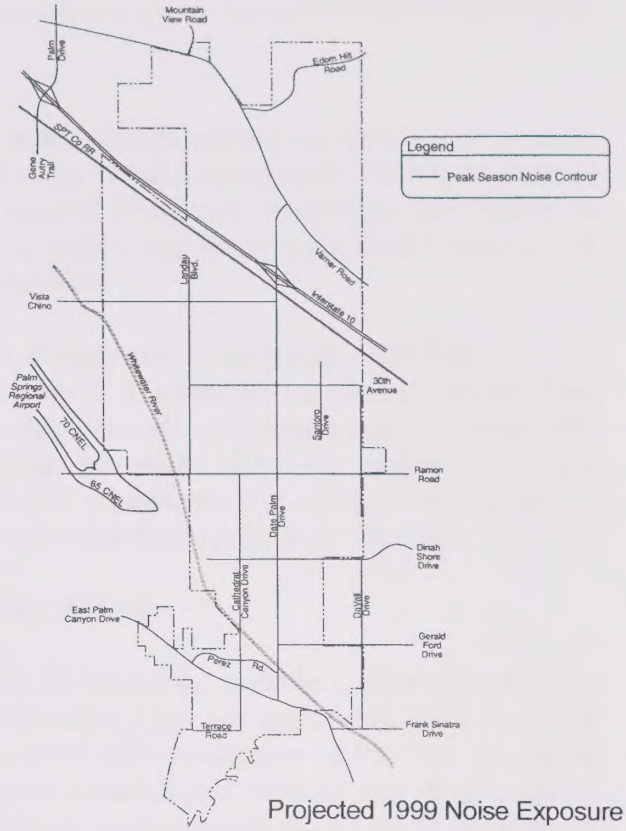
City of Cathedral City
General Plan
Sensitive Noise Receptors

Cathedral City

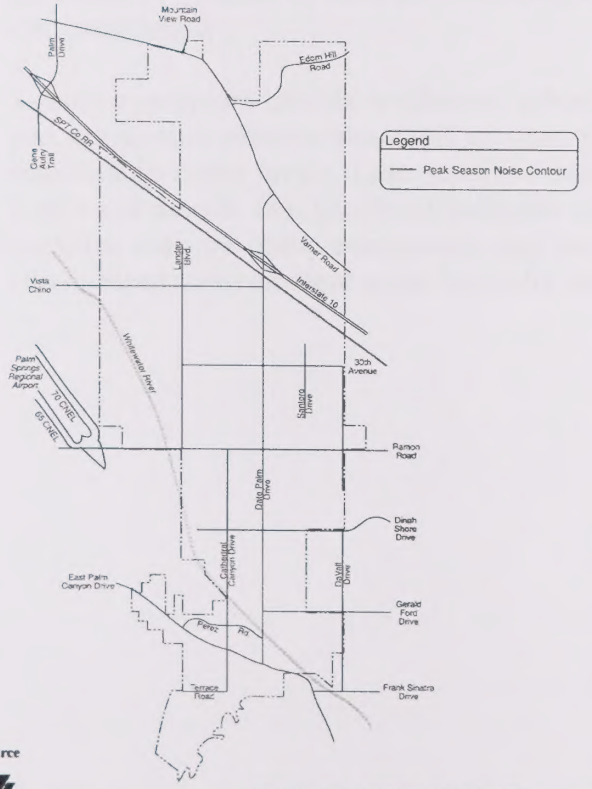
Exhibit
V-8



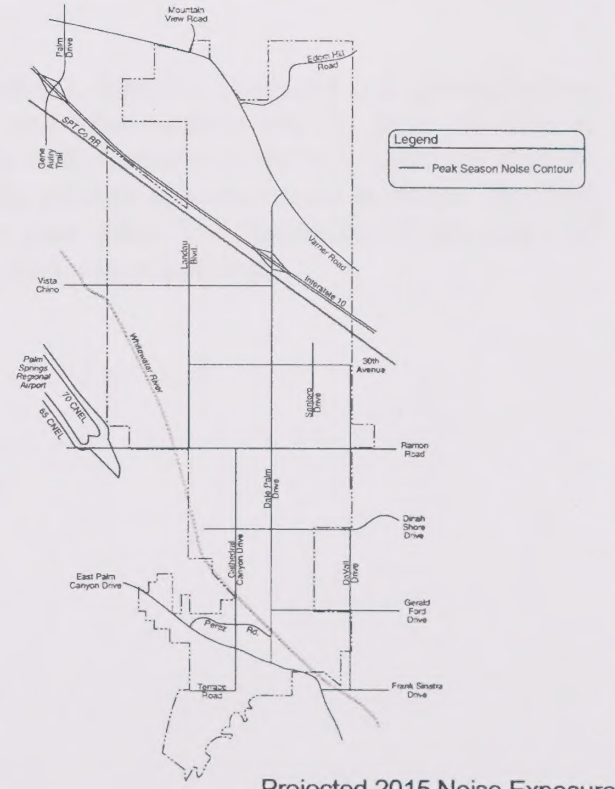
Projected 1993 Noise Exposure



Projected 1999 Noise Exposure



Projected 2005 Noise Exposure



Projected 2015 Noise Exposure

Source

Endo Engineering

TERRA NOVA®
Planning & Research, Inc.

City of Cathedral City
General Plan
Palm Springs Regional Airport
Projected Noise Exposure

Cathedral City

Exhibit

V-9

Mechanical and Industrial Noise

There are other noise generators within the City, in addition to noise generated by automobile traffic and aircraft, which could create significant noise related dissonance. Activities such as construction and automotive repair and other related industrial operations can result in unacceptable noise levels. Loading and materials transfers and other acoustically unscreened operations will also raise issues of impact and compatibility.

Significant noise can also result from the operation of mechanical equipment, including refrigerator units and heating/air conditioner equipment in commercial centers. Noise from roof-mounted equipment can travel to bordering neighborhoods and impact sensitive receptors. Fans and compressors which emit a constant hum can adversely affect the quality of life in a residential neighborhood. The design and location of equipment can mitigate this potential impact, and should be included in the review of new development projects by the City.

The Community Noise and Land Use Compatibility Model

The standard used for maximum outdoor noise levels in residential areas in California and in the City is a CNEL of 65 dBA. Within the City of Cathedral City, the applicable limit one-hour average for outdoor noise levels in residential areas is 55 dBA (ordinance 11.96.030). The noise impacts are "unmitigated" or represent the worst-case noise impact without any obstruction of the noise. A number of tools are available to the City to substantially reduce noise impacts, as discussed below.

Sensitive receptors include residences, schools, libraries, churches, hospitals and nursing homes, and destination resort areas. Golf courses, parks, and other outdoor activity areas can also be sensitive to noise levels. Less sensitive land uses include commercial and industrial centers, hotels and motels, neighborhood ballparks and other outdoor spectator sport facilities. The least sensitive uses are heavy commercial and industrial uses. Table V-3 depicts the CNEL ranges of allowable exterior ambient noise levels for various land uses at buildout.

Table V-2
Land Use Compatibility for Community Noise Environments

Land Uses	CNEL (dBA)						
	50	55	60	65	70	75	80
Residential - Single Family Dwellings, Duplex, Mobile Homes	A						
		B					
					C		
						D	
Residential – Multiple Family	A						
			B				
					C		
						D	
Transient Lodging: Hotels and Motels	A						
			B				
					C		
							D
School Classrooms, Libraries, Churches, Hospitals, Nursing Homes and Convalescent Hospitals	A						
			B				
					C		
							D
Auditoriums, Concert Halls, Amphitheaters							
	B						
						C	
Sports Arenas, Outdoor Spectator Sports							
	B						
						C	
Playgrounds, Neighborhood Parks	A						
					C		
						D	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	A						
					C		
							D
Office Buildings, Business, Commercial and Professional	A						
					B		
						D	
Industrial, Manufacturing, Utilities, Agriculture	A						
					B		
						D	

Source: Cathedral City General Plan Update Noise Background Study", Endo Engineering, 2001: *California Department of Health Services, "Guidelines for the Preparation and Content of the Noise Element of the General Plan," 1990*

Explanatory Notes

A **Normally Acceptable**: With no special noise reduction requirements assuming standard construction.

B **Conditionally Acceptable**: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design

C **Normally Unacceptable**: New construction is discouraged. If new construction does not proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

D **Clearly Unacceptable**: New construction or development should generally not be undertaken.

Cathedral City Noise Ordinance

The City has established noise standards by adopting an amendment to its Municipal Code. Chapter 11.96 of the Cathedral City Municipal Code establishes community-wide noise standards and emphasizes the value of an acceptable noise environment. It provides regulations for noise measurement and monitoring and cites special provisions of, and exemptions to, the ordinance. It is intended to regulate excessive noise from existing uses and activities, and to serve as a references guide for identifying other pertinent noise regulations. The Cathedral City Noise Ordinance provides definitions of key terms and establishes exterior noise level standards on a time-of-day basis along with adjustments for intensity and duration. It also provides regulations for noise measurement/monitoring. Violations of the Noise Ordinance are defined as a nuisance and subject to the procedures, remedies and penalties for such nuisances. The Noise Ordinance regulates existing uses and activities, while the noise standards in the General Plan are intended to guide the location of future noise generators and sensitive land uses.

Noise Measurements and Computer Modeling: Existing and Projected Future Noise Levels

The noise levels at 100 feet from each road's centerline were determined by modeling the roadway with the Highway Traffic Noise Prediction Model (RD-77-108), developed by the Federal Highway Administration. The model includes a number of parameters modifiers, including traffic volume, vehicle mix and speed, and roadway geometry. The resulting noise levels are then weighted, added for a 24 hour period, and output as a CNEL measurement. CNEL contours are then located for the 60, 65 and 70 CNEL location. A detailed description of the modeling done for this General Plan is included in the General Plan EIR and its appendices.

Increasing traffic volumes are expected to generate the leading future noise impacts to the community. The Circulation Element Traffic Study was used to determine roadway volumes at buildout. The average posted speed limits and a percentage mix of light and heavy truck traffic along the roadways was included in the modeling data, making the projected traffic noise data more accurate.

Project-specific site design will significantly reduce noise impacts below those projected, and therefore, these estimates are considered conservative and unmitigated. Table V-4 lists the 1999 and preferred General Plan buildout noise contours along the City's major roadways.

Table V-3
1999 and General Plan Buildout Projected Noise Contours On Major Roadways
(Distance To CNEL Contours in Feet from Centerline)

	1999 Traffic			General Plan Buildout		
Roadway Link	**60**	**65**	**70**	**60**	**65**	**70**
Interstate-10						
W/O Date Palm Drive	1,567	729	342	2,938	1,365	635
E/O Date Palm Drive	1,744	811	380	3,587	1,666	775
Palm Drive						
S/O Date Palm Drive	N/A	N/A	N/A	810	377	178
Mountain View Drive						
E/O Date Palm Drive	N/A	N/A	N/A	474	223	108
Edom Hill Road						
S/O Date Palm Drive	N/A	N/A	N/A	105	51	R/W
Valley Center Boulevard						
E-O Palm Drive	N/A	N/A	N/A	285	134	66
W-O City Limit	N/A	N/A	N/A	294	138	68
W-O Date Palm Drive	N/A	N/A	N/A	418	195	93
E/O Date Palm Drive	N/A	N/A	N/A	359	168	81
W-O Da Vall Drive	N/A	N/A	N/A	399	187	89
Landau Boulevard						
N-O Vista Chino	N/A	N/A	N/A	207	99	50
S-O Vista Chino	N/A	N/A	N/A	125	62	R/W
N-O 30th Avenue	N/A	N/A	N/A	158	76	R/W
S-O 30th Avenue	N/A	N/A	N/A	184	88	R/W
N/O Ramon Road	160	77	R/W	192	92	R/W
Cathedral Canyon Drive						
S/O Ramon Road	332	156	75	219	103	50
N/O Dinah Shore Drive	N/A	N/A	N/A	155	73	R/W
S/O Dinah Shore Drive	238	112	56	172	81	R/W
N/O Perez Road	N/A	N/A	N/A	157	75	R/W
S/O E. Palm Canyon Drive	N/A	N/A	N/A	135	65	R/W
Date Palm Drive						
E/O Palm Drive	N/A	N/A	N/A	339	161	82
E-O Mountain View Road	N/A	N/A	N/A	615	287	137
E-O Edom Hill Road	N/A	N/A	N/A	578	270	130
S/O Varner Road	182	85	RW	544	255	123

Table V-3 (Continued)
1999 and General Plan Buildout Projected Noise Contours On Major Roadways
(Distance To CNEL Contours in Feet from Centerline)

	1999 Traffic			General Plan Buildout		
Roadway Link	**60**	**65**	**70**	**60**	**65**	**70**
Date Palm Drive (cont'd)						
S/O Valley Center Boulevard	N/A	N/A	N/A	684	319	152
N/O Vista Chino	412	192	92	874	407	192
S/O Vista Chino	405	189	90	561	262	126
N-O 30th Avenue	387	181	87	544	255	123
S-O 30th Avenue	264	125	62	372	176	88
N/O Ramon Road	334	159	81	433	204	100
S/O Ramon Road	377	178	89	416	201	99
N/O Dinah Shore Drive	370	173	83	420	198	99
S/O Dinah Shore Drive	372	176	88	460	216	105
N/O Gerald Ford Drive	337	158	76	426	201	99
N/O Perez Road	348	163	79	482	226	110
S/O Perez Road	N/A	N/A	N/A	426	201	99
N-O E. Palm Canyon Drive	260	123	61	366	173	87
S-O E. Palm Canyon Drive				142	67	33
Da Vall Drive						
S/O Varner Road	N/A	N/A	N/A	332	156	75
N/O Interstate 10	N/A	N/A	N/A	654	305	145
S/O Interstate 10	N/A	N/A	N/A	634	296	141
N-O 30th Avenue	N/A	N/A	N/A	561	262	126
S-O 30th Avenue	N/A	N/A	N/A	327	153	74
N/O Ramon Road	RW	RW	RW	299	140	68
S/O Ramon Road	RW	RW	RW	290	136	67
Da Vall Drive						
S/O Dinah Shore Drive	N/A	N/A	N/A	313	147	71
S/O Gerald Ford Drive	N/A	N/A	N/A	353	165	80
Varner Road						
E/O Date Palm Drive	110	51	RW	227	108	54
W/O Da Vall Drive	N/A	N/A	N/A	211	100	51
E/O Da Vall Drive	N/A	N/A	N/A	317	149	72
Vista Chino						
E/O City Limit				460	216	105
W/O Landau Boulevard	387	181	87	420	198	97
W/O Date Palm Drive	317	149	72	596	279	133
E/O Date Palm Drive	N/A	N/A	N/A	187	89	R/W
W/O Da Vall Drive	N/A	N/A	N/A	207	99	50

Table V-3 (Continued)
1999 and General Plan Buildout Projected Noise Contours On Major Roadways
(Distance To CNEL Contours in Feet from Centerline)

	1999 Traffic			General Plan Buildout		
Roadway Link	**60**	**65**	**70**	**60**	**65**	**70**
30th Avenue						
W/O Date Palm Drive	78	RW	RW	183	86	RW
E/O Date Palm Drive	80	RW	RW	289	135	65
W-O Da Vall Drive	N/A	N/A	N/A	302	141	67
Ramon Road						
W/O Landau Boulevard	412	192	92	544	255	123
W/O Cathedral Canyon Drive	474	223	108	536	251	121
W/O Date Palm Drive	433	204	100	561	262	126
E/O Date Palm Drive	332	156	75	496	233	113
W/O Da Vall Drive	N/A	N/A	N/A	570	266	128
E/O Da Vall Drive	424	198	94	606	283	135
Tachevah Drive						
E/O Date Palm Drive	N/A	N/A	N/A	44	R/W	R/W
E/O Santoro Drive	N/A	N/A	N/A	44	R/W	R/W
Santoro Drive						
S/O 30th Avenue	N/A	N/A	N/A	248	116	56
N/O Ramon Road	N/A	N/A	N/A	185	88	44
Dinah Shore Drive						
W/O Cathedral Canyon Drive	82	RW	RW	502	234	111
W/O Date Palm Drive	176	84	RW	465	217	103
E/O Date Palm Drive	201	96	RW	431	201	96
W-O Da Vall Drive	N/A	N/A	N/A	472	220	104
E-O Da Vall Drive	158	74	RW	376	176	84
Gerald Ford Drive						
E/O Date Palm Drive	267	125	60	327	153	74
W-O Da Vall Drive	N/A	N/A	N/A	337	158	76
E-O Da Vall Drive	249	117	58	317	149	72
Perez Road						
N/O E. Palm Canyon Drive	N/A	N/A	N/A	224	106	54
W/O Cathedral Canyon Drive	175	83	R/W	249	117	58
W/O Date Palm Drive	231	110	58	294	138	68
Buddy Rodgers	N/A	N/A	N/A			
E/O Date Palm Drive	N/A	N/A	N/A	337	158	76

Table V-3 (Continued)
1999 and General Plan Buildout Projected Noise Contours On Major Roadways
(Distance To CNEL Contours in Feet from Centerline)

	1999 Traffic			General Plan Buildout		
Roadway Link	**60**	**65**	**70**	**60**	**65**	**70**
East Palm Canyon Drive						
W/O Perez Road	343	160	77	395	186	92
E/O Perez Road	N/A	N/A	N/A	324	154	79
W/O Cathedral Canyon Drive	313	147	71	315	150	77
E/O Cathedral Canyon Drive	N/A	N/A	N/A	310	148	76
W/O Date Palm Drive	273	128	63	259	124	66
E/O Date Palm Drive	N/A	N/A	N/A	634	296	141
"C" Street						
E/O Cathedral Canyon Drive	N/A	N/A	N/A	98	46	R/W
W/O Date Palm Drive	N/A	N/A	N/A	134	62	R/W
Frank Sinatra Drive						
E/O E. Palm Canyon Drive	245	116	58	290	136	67
E/O Da Vall Drive	256	121	60	424	198	94

Source: Cathedral City General Plan Update Noise Background Study", Endo Engineering, 2002

Mitigating Noise Impacts

Preserving a quiet noise environment can be accomplished through thoughtful transportation planning, land use planning, project design mitigation, simple and sophisticated technology, and acoustical barriers applied to community noise compatibility Site planning and design standards should provide direct noise impact mitigation for areas particularly impacted by noise. The use of buffer zones consisting of earthen berms, walls and landscaping between sensitive land uses and roadways and other noise sources is an effective tool for noise mitigation. Building orientation, particularly the placement of windows, can significantly mitigate impacts on residential land uses. A number of materials are also available which can baffle noise sources, and result in effective noise mitigation. When development proposals include sensitive receptors planned next to the impacted roadways described in Table V-4 above should be required to complete noise analysis, which will include mitigation measures, to ensure that the buildout of the project will not result in unacceptable noise levels.

FUTURE DIRECTIONS

Consistent with its character as a resort residential community, the City of Cathedral City benefits from an essentially quiet noise environment. Highway and major roadway noise sources, however, clearly impact the City. Future efforts in this regard should focus on the preservation of the peaceful and quiet atmosphere enjoyed presently by residents and visitors to the community. The Land Use Element, and particularly the assignment of land use designations will have a critical role to play in the City's ability to control noise for sensitive receptors in the future. Another level of land use control is provided by zoning designations, which provide development standards that reduce impacts and enhance compatibility. The Circulation Element has also been designed, where possible, to protect the City's residential areas from excessive

traffic noise and to assure appropriate noise levels. The ongoing coordination of these two elements of the General Plan must play a key role in the City's consideration of development projects, public works improvements, and City sponsored construction.

GOAL, POLICIES AND PROGRAMS

Goal

A noise environment that complements the City' low density residential character and its various land uses.

Policy 1
Protect noise sensitive land uses, including residential neighborhoods, schools, hospitals, libraries, churches, resorts and community open space, as well as land uses proposed in the vicinity of the railway, Interstate 10, the Mid-Valley Parkway, and Da Vall Drive from high noise levels generated by existing and future noise sources.

Program 1.A
Develop and maintain an inventory of existing noise sources and areas of incompatibility and establish procedures to reduce the noise levels in these areas, where economically and aesthetically feasible.
Responsible Agency: Planning Department; Public Works Department
Schedule: 2003-04

Program 1.B
Require building setbacks, the installation of wall and window insulation, soundwalls, earthen berms, and/or other mitigation measures in areas exceeding the City's noise limit standards for private development projects as they occur.
Responsible Agency: Planning Department
Schedule: Continuous

Program 1.C
Maintain and enforce a Noise Control ordinance that establishes community-wide noise standards and identifies measures designed to resolve noise complaints.
Responsible Agency: Planning Department
Schedule: Ongoing

Program 1.D
Use Specific Plans and the development review process to encourage the use of buffers between noise sensitive land uses and incompatible land uses.
Responsible Agency: Planning Department; Planning Commission; City Council
Schedule: Ongoing

Program 1.E
Parking lots, loading zones, and large trash bins shall be located at a sufficient distance from adjacent residential properties to reduce associated noise impacts.
Responsible Agency: Planning Department
Schedule: Continuous.

Policy 2
The relationship between land use designations in the Land Use Element and changes in the circulation pattern of the City, as well as individual developments shall be monitored and mitigated.

Program 2.A
The City zoning ordinance and development review standards shall be used to limit land use patterns and project designs to those that are noise compatible.
Responsible Agency: Planning Department
Schedule: Continuous

Program 2.B
Develop guidelines and minimal criteria requirements for noise analyses for future development projects. Studies shall evaluate project impacts and the effectiveness of proposed mitigation measures.
Responsible Agency: Planning Department; Public Works Department
Schedule: 2003-04; Every five years.

Program 2.C
Periodically review and amend the Land Use map as appropriate to assure reasonable land use/noise level compatibility.
Responsible Agency: Planning Department
Schedule: Annually.

Policy 3
Private sector project proposals shall include measures that assure that noise exposures levels comply with State of California noise insulation standards as defined in Title 25 (California Noise Insulation Standards).

Policy 4
Maintain a circulation map which maintains low levels of traffic within neighborhoods, and assigns truck routes to major roadways only.

Program 4.A
Designate primary truck routes and ensure that they are clearly marked throughout the community. Except for traffic providing location-specific services and deliveries, construction trucks and delivery trucks shall be limited to East Palm Canyon Drive, Interstate-10, Date Palm Drive, Dinah Shore Drive, Ramon Road, and Vista Chino.
Responsible Agency: Public Works Department, City Engineer
Schedule: 2001-2002

Program 4.B
Development projects which result in through-traffic in residential neighborhoods shall be discouraged through the development review process.
Responsible Agency: Planning Department, Public Works Department, City Engineer
Schedule: Ongoing

Policy 5
Maintain an ongoing contact with the Palm Springs Airport to ensure that flight paths and airport improvements do not impact or extend noise contours into the City.

Policy 6
Coordinate with adjoining municipalities to assure noise-compatible land uses across jurisdictional boundaries.

Policy 7
The City shall restrict grading and construction activities that may impact residential neighborhoods to specified days of the week and times of day.

HAZARDOUS AND TOXIC MATERIALS ELEMENT

PURPOSE

The Hazardous and Toxic Materials Element describes methods to safely manage hazardous and toxic materials in the community. This Element reinforces the City's concern for the protection of its residents and visitors from adverse health and other impacts associated with these materials. Policies and programs are established which assure effective and safe use, storage, and transport of hazardous and toxic substances in the City of Cathedral City.

BACKGROUND

The rapid and innovative development of new technologies and chemical processes has resulted in the introduction of new and potentially hazardous materials. Accidental spills, illegal dumping, and other uncontrolled discharges of these materials can pose a significant threat to the community and its environment.

The Air Quality and Water Resources Elements are directly related to the Hazardous and Toxic Materials Element in their efforts to preserve clean air and protect against water resource contamination. This Element is also related to the Land Use Element, with the potential of hazardous material use, storage, or disposal to undermine land use compatibility. The Public Safety Element also plays an important role in establishing policies and programs to protect the general public from adverse impacts associated with toxic and hazardous materials. The Biological Resources Element may be negatively impacted by improper management of these materials.

It is mandated by California Government Code Section 65302(g) that the General Plan of a community address safety issues, including but not limited to hazardous materials. Responsibility for regulating and monitoring the management, disposal, labeling, and use of toxic and hazardous materials lies with a variety of federal. State, and local agencies, including the U.S. Environmental Protection Agency, the California Office of Health Planning and Development, and the Riverside County Department of Health. AB 2948 (Chapter 1504, Statutes of 1986), commonly known as the Tanner Bill, authorizes counties to prepare Hazardous Waste Management Plans (HWMP) in response to the need for sage management of hazardous materials and waste products. The California Regional Water Quality Control Board (CRWQCB), as well as the Coachella Valley Water District, maintains information concerning contaminated water wells and groundwater. The state and federal Environmental Protection

Agencies (EPA) and the State Department of Health also provide information concerning specific hazardous waste sites.

There are no large industrial or commercial users of hazardous materials in the City, only a few identified hazardous/toxic material small quantity generators are associated with commercial, and quasi-industrial and medical operations. These have the potential to be associated with accidental spills, purposeful illegal dumping, air emissions, and other uncontrolled discharges into the environment. Improper use and management of these materials pose a significant potential threat to the community and its environment. The small quantity generators in the City include gasoline service stations, auto repair shops, dry cleaners and medical clinics.

Products, chemical and purified chemical compounds, and elements that re considered hazardous or toxic exist in wide variety and are used in households, commercial businesses and industrial operations and processes. They range through home and pool related chlorine products, chemical fertilizers, herbicides and pesticides, stored fuels and waste oil, chemical solvents and lubricants, and a variety of medical materials.

Known or identified underground fuel storage occurring at locations in the City, where leakage has occurred in the past has been mostly confined to gasoline service stations and commercial operations which maintain on-site fuel tanks for their delivery vehicles. The Regional Water Quality Control Board maintains listings for such sites, and monitors them as required. The U.S. EPA requires all service stations to retrofit or replace underground storage tanks with double-walled construction. In the City Sphere-of Influence various industrial activities, including machining, wind turbine servicing, and materials research, also have the potential for uncontrolled discharge of hazardous materials.

Hazardous Waste and Sewage Disposal

An area of recent concern in the Coachella Valley and the Cathedral City area has been the impact of long-term septic tank use on groundwater resources. Contamination problems have not been particularly evident, although impacts on the lower portions of alluvial cones with extensive upslope residential development are areas of concern. Monitor wells in the Cove area show that elevated levels of nitrate and viruses from subsurface septic systems have been detected, but do not currently exceed County regulations (see also the Water Resources Element). The use of septic tanks in these generally porous soils and on sloping gradients can result in concentrated flows of seepage to the lower portions of these areas and can result in contamination of the water table. Septic tanks are still commonly in use in Cathedral City and their use will continue to pose varying threats to ground water.

Hazardous Waste Management Plans

The City of Cathedral City coordinates with appropriate county, state and federal agencies in the identification of hazardous material sites, and their timely cleanup. In order to manage these issues, the City may establish and maintain information on these sites, and periodically monitor facilities and operations that produce, utilize or store hazardous materials in the city. By staying

involved in multi-agency monitoring of illegal dumping in the City, conferring in the regulation of underground storage tanks and septic systems, and regulating the transport of hazardous materials through the community, the City can better protect against potential hazards associated with hazardous materials and wastes.

AB 2948 (Chapter 1504, Statures of 1986), commonly known as the Tanner Bill, authorizes counties to prepare Hazardous Waste Management Plans (HWMP) in response to the need for safe management of hazardous materials and waste products. The Riverside county HWMP was adopted by the Board of Supervisors and approved by the California Department of Health Services in 1990. The County HWMP identifies the types and amounts of wastes generated in the County and established programs for managing these wastes.

To comply with Health and Safety Code Section 25135, the Riverside County HWMP assures that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within the jurisdiction, and addresses issues related to manufacture and use. This plan was developed jointly by the County, Cathedral City and other cities within the County, the State, the public and industry to address the disposal, handling, processing, storage and treatment of local hazardous materials and waste products.

Preparation of the HWMP included extensive public participation. Its policies require the coordination of County efforts with state and federal agencies in the identification and establishment of programs for managing these wastes. As an integral part of the County HWMP, the City of Cathedral City hazardous waste management policies for the General Plan are basically extensions of the County Plan and are hereby incorporated by reference. Currently (2001), there are several sources of information concerning hazardous waste sites in the City of Cathedral City area.

The California Regional Water Quality Control Board (CRWQCB) and the Coachella Valley Water District, maintain information concerning contaminated wells and groundwater, The state and federal Environmental Protection Agencies (EPA) and the State Department of Health also supply information concerning specific hazardous waste sites and their locations. The California Department of Industrial Relations, Cal-OSHA Division, regulates the proper use of hazardous materials in industrial settings. Private database screening and documentation services are also available, which will search, extract, and summarize reports on contaminated site recorded in various state and federal databases.

Household Hazardous Waste

Residential use of household chemicals, automobile batteries and used oil, paint and similar materials result in hazardous waste. The County offers a number of services for the disposal of residential hazardous wastes. These include the "ABOP" (Antifreeze, Batteries, Oil and Latex Paint) site, located at the Palm Springs Fire Department Training Center in Palm Springs, which will dispose of these materials for residential users. The facilities will take up to 5 gallons or 50 pounds of materials per trip, and all materials must be clearly marked and sealed. The site is open every Saturday, and will only take materials from individuals. No business wastes are

permitted. The City's Environmental Conservation Manager is working with the County to establish an ABOP site in Cathedral City.

City residents may also dispose of their used motor oil by placing it next to their garbage or recycling container at the curb on their regular collection day. Up to two gallons per pick up is permitted. Waste Management of the Desert collects the oil, and disposes of it.

The County also organizes Household Hazardous Waste collection days throughout the year at fire stations and city corporation yards across the Valley. The schedule is posted and advertised periodically.

Residents may also dispose of waste motor oil at several Used Motor Oil Drop-Off Centers located in Cathedral City, including Chief Auto Parts, Crystal Chrysler Center, Firestone Tires, Pep Boys and The Lube Shop.

Hazardous Materials Response

Hazardous and toxic materials are determined critical by the County Department of Health, and the County and the City can require property owners to test, temporarily close and/or remove all hazardous liquids, solids or sludge located on the site. Leaking underground storage tanks must be removed by contractors having Hazardous Waste Certification and a General Engineering license. Between cessation of storage and actual closure, monitoring is generally required by the site's operating permit. When soils contamination is detected, the clean up procedure to be followed, the degree or level of cleanliness required by the regulator, and the method of treatment (if permitted) will be directed by the County Health Hazardous Materials Division and/or the Regional Water Quality Control Board.

The City of Cathedral City has the opportunity to coordinate with appropriate county, state, and federal agencies in the identification of hazardous material sites, and the active regulation of their timely cleanup. The Cathedral City Fire Station #412, located within the city limits, has the capacity of authority as a First Response Team; the agency responsible for the Hazardous Response Plan is the County of Riverside Health Hazardous Materials Division and/or the Regional Water Quality Control Board.

FUTURE DIRECTIONS

The City of Cathedral City has the responsibility to coordinate with the appropriate agencies in the identification of hazardous material sites, and the active regulation of their timely cleanup. This element can most efficiently be implemented through regular consultation with the RWQCB and the County Health Department and by updating information on hazardous material sites, monitoring facilities that utilize or produce hazardous materials within the City. The City should also remain current regarding the monitoring and regulating of underground storage tanks and septic systems, and regulating the transport of hazardous materials through the community.

A prudently coordinated program of oversight and management between responsible agencies will be essential. Regular consultation and coordination between the City Emergency Preparedness Director and responsible county and state agencies is also appropriate. Processes for determining appropriate levels of local, County and State personnel and facilities will also be critical. The goals, policies and programs of this element help to direct the planning and development of appropriate strategies to address hazardous and toxic materials in the community.

GOAL, POLICIES AND PROGRAMS

Goal

An environment which is safe from the threat of hazardous and toxic materials.

Policy 1
Utilizing the resources available through the County of Riverside and the Regional Water Quality Control Board, maintain current data on hazardous materials users within the planning area.

Program 1.A
Update the City's data on hazardous materials users quarterly, by regularly contacting the County Department of Environmental Health and the Regional Water Quality Control Board and securing their databases or lists.
Responsible Agencies: Fire Department; County Environmental Health Department; Regional Water Quality Control Board
Schedule: Continuous

Program 1.B
Coordinate with responsible agencies to assure enforcement of state and federal regulations for the testing and monitoring of underground fuel storage tanks for leakage.
Responsible Agencies: Public Works Department; Planning Department; Fire Department; State and federal EPA; County Health Department
Schedule: Continuous

Program 1.C
A Conditional Use Permit shall be required for all new development that generates, transports, or stores hazardous materials.
Responsible Agencies: Planning Department
Schedule: Continuous

Policy 2
Encourage and facilitate the adequate and timely cleanup of existing and future contaminated sites within the City and its sphere-of-influence.

Program 2.A
Coordinate with responsible state and federal agencies to activate cleanup procedures, and monitor the status of cleanup efforts on an ongoing basis.
Responsible Agencies: Fire Department; State and federal EPA; County Health Department; CRWQCB
Schedule: Continuous

Policy 3
The City shall thoroughly evaluate development proposals for lands directly adjacent to sites know to be contaminated with hazardous or toxic materials.

Policy 4
The City shall designate appropriate access routes to facilitate the transport of hazardous and toxic materials.

Program 4.A
Coordinate with the Fire Department, Police Department, neighboring jurisdictions, and other appropriate agencies to identify segments of highway or local roads that shall be restricted from transporting hazardous and toxic materials to preserve public safety.
Responsible Agencies: Planning Department; Fire Department; Police Department
Schedule: Continuous

Program 4.B
Enforce roadway access restrictions and consider the implementation of fines or penalties for violations.
Responsible Agencies: Public Works Department; Fire Department; Police Department
Schedule: Continuous

Policy 5
The Fire Department shall maintain a citywide Emergency Response Program, which provides for emergency services in the event of a hazardous spill or airborne release.

Policy 6
Encourage households and small businesses to dispose of hazardous and toxic wastes in accordance with county, state, and federal regulations.

Program 6.A
Continue to distribute information materials provided by the County and the Regional Water Quality Control Board regarding proper management and disposal of household hazardous and toxic wastes, and post it on the City web site.
Responsible Agencies: Environmental Conservation Manager, County Environmental Health
Schedule: Immediate; Continuous

Program 6.B
Implement the Household Hazardous Waste Element (HHWE) as prepared by the Coachella Valley Association of Governments and its member cities.
Responsible Agencies: Fire Department
Schedule: Immediate; Continuous

Policy 7
The City shall actively oppose plans for hazardous or toxic waste dumps, landfills, or industrial processes that may potentially adversely affect the City and its Sphere-of-Influence, and shall participate in the identification of alternative sites.

Policy 8
Confer and coordinate with the Coachella Valley Water District, Desert Water Agency, and the California Regional Water Quality Control Board in the regulation, monitoring, and phased removal of subsurface sewage disposal systems.

Program 8.A
The development review process shall be used to assure that all new development connects to the sewage collection systems of the Coachella Valley Water District and Desert Water Agency where that service is available.
Responsible Agencies: Planning Department; Public Works Department; DWA; CVWD
Schedule: Continuous

CITY OF CATHEDRAL CITY

COMPREHENSIVE GENERAL PLAN

CHAPTER VI

PUBLIC SERVICES AND FACILITIES

This chapter of the General Plan addresses the public services and facilities needed to support development in the City of Palm Desert. General Plan elements found in this chapter that discuss these services and facilities include Water, Sewer and Utilities, Fire and Police Protection, Schools and Libraries, Health Services, Emergency Preparedness, Public Building and Facilities, and Arts and Culture. The levels of service needed for residential, commercial and industrial development is directly related to the intensity of development in the community. The economic life of the City is tied to the level of services, the types and intensities of land use, and the levels of demand for services and the revenue generating potential of urbanizing areas.

WATER, SEWER AND UTILITIES ELEMENT

PURPOSE

The Water, Sewer and Utilities Element establishes City policies and programs pertaining to domestic water, sewage treatment, and utility services. The provision of these services is essential for the orderly growth and development of the community. In addition to water and sewer services, this element addresses natural gas, electricity, telephone, cable, and solid waste management. The element identifies goals, policies and programs necessary to provide a coordinated system of services to the City at full buildout.

BACKGROUND

The Water, Sewer and Utilities Element is directly related to the Land Use Element, in that new development must be planned in conjunction with the extension and availability of essential infrastructure. Other related elements include Water Resources, Energy and Mineral Resources, and Flooding and Hydrology.

According to California Government Code Section 65302(d), the General Plan is required to address the conservation, development, and utilization of natural resources, including water. Related to this is the availability and utilization of natural resources, such as natural gas and electricity. This element satisfies, in part, the requirement for a Conservation Element, and addresses other utilities as allowed by Section 65303. California Government Code Section 65103(c) requires that the City review its capital improvement program annually to assure consistency with the General Plan. This Element provides an effective and meaningful framework from which to comply with this law.

Domestic Water

Groundwater Resources

The primary groundwater repository for the Coachella Valley is the Whitewater River Subbasin, which encompasses nearly 400 square miles. Most of the City of Cathedral City overlies the Palm Springs subarea of the Whitewater River Subbasin, which contains an estimated 4.6 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface. The easterly portion of the City occurs over the Upper Thermal subarea, which extends as far east as the Salton Sea. The entire Thermal subarea (including the Upper and Lower portions) contains approximately 19.4 million acre-feet of groundwater in storage in the first 1,000 feet below the surface. The northernmost portion of the planning area, north of Interstate-10 and south of the Indio Hills, overlies the Thousand Palms subarea. This subarea contains approximately 1.8 million acre-feet of groundwater in storage.

The hydrological and geophysical characteristics of these subareas are discussed in greater detail in the Water Resources Element of the General Plan, as are methods of groundwater replenishment and consumption rates in the Coachella Valley.

Coachella Valley Water District

The Coachella Valley Water District (CVWD) provides domestic water to development north and east of the Whitewater River Stormwater Channel. CVWD utilizes deep wells to extract groundwater from the Whitewater River Subbasin. Within the planning area, CVWD's domestic water system includes 12 well sites, 2 booster stations, 3 water storage reservoirs, and water mains up to 30 inches in diameter. Major water trunk lines serving the planning area include those beneath Date Palm Drive, Vista Chino, 30th Avenue, Ramon Road, Dinah Shore Drive and Gerald Ford Drive. Nearly all development in CVWD's service area, south of I-10, is connected to its water delivery system.

Land north of Interstate-10 in the planning area is also located within CVWD's service area. However, given that development in this vicinity is sparse and largely limited to scattered residences, CVWD's domestic water infrastructure in this area is minimal. Two water storage reservoirs are located off Varner Road, approximately one-half mile west of Date Palm Drive. The reservoirs are connected to development south of I-10 by a 30-inch water main, which extends south along Varner Road and Date Palm Drive, then crosses beneath the interstate. Other water mains north of I-10 are limited to those at the northerly boundary of the planning area, on 20th Avenue west of Mountain View Road. CVWD has indicated that it will be able to expand its water delivery system to serve future development in this area, should the demand for such facilities warrant it.

Desert Water Agency

The Desert Water Agency (DWA) provides domestic water to development south and west of the Whitewater River Stormwater Channel. Nearly all development in DWA's service area, including development in the Cove and the downtown district, is connected to its water delivery system. Within the planning area, DWA's water delivery system includes 3 wells, 2 booster stations, 4 water storage reservoirs, and water mains ranging in size from 2 to 24 inches in diameter. Two of the wells are located at the Whitewater River and Ramon Roads, and the other is located at Cathedral Canyon and Kieley Roads. Each is capable of producing between 1,800 and 2,400 gallons of water per minute. The booster stations are located in the Cove and are capable of pumping between 200 and 400 gallons per minute. The reservoirs are located in the immediate vicinity of the Cove, and their capacities range from 100,000 to 500,000 gallons. Major trunk lines include those under East Palm Canyon Drive, Cathedral Canyon Drive, and Perez Road.

Wastewater Collection and Treatment

Coachella Valley Water District

The Coachella Valley Water District provides wastewater collection and treatment services to lands north and east of the Whitewater River Stormwater Channel. Wastewater is conveyed through sewer lines ranging from 4 to 24 inches in diameter.

The major wastewater conveyance facilities in the planning area include 15-inch and 24-inch sewer trunk lines, which extend along Date Palm Drive. From Date Palm Drive, the 15-inch line continues east on Gerald Ford Drive, and the 24-inch line continues east along the Whitewater River Stormwater Channel, where it feeds into the Cook Street Wastewater Reclamation Plant in Palm Desert. The Cook Street Wastewater Reclamation Plant currently has a capacity of 20 million gallons per day (mgd). CVWD continually increases the capacity of its wastewater reclamation facilities by constructing new treatment ponds, aeration plants and other structures.

Land north of Interstate-10 also occurs within CVWD's service area. However, development in this area is sparse, and CVWD does not operate any wastewater collection or treatment facilities in the area at this time. All wastewater disposal in this area is accommodated through private septic systems.

Desert Water Agency

DWA's service area encompasses lands south and west of the Whitewater River Stormwater Channel. DWA's wastewater collection system utilizes sewer mains ranging in size from 8 to 18 inches in diameter. DWA does not operate a wastewater treatment plant. Instead, its wastewater collection system is connected to CVWD's sewer system by two lift stations at the following locations: 1) Date Palm Drive and Buddy Rogers Drive, and 2) Cathedral Canyon Drive near Kieley Road. Wastewater collected by DWA is gravity-fed to these lift stations, where it joins CVWD's sewer system and is conveyed to the Cook Street wastewater treatment plant in Palm Desert.

All residential development in the Cove continues to rely on individual septic systems for wastewater disposal. DWA has indicated that it has enough capacity available in its existing sewer conveyance system to manage waste generated in the Cove, and limited development in the area, including the recently restored St. Louis Church, has been connected to DWA's sewer conveyance system. The City and DWA are actively involved in planning future sewer connections in the Cove and the Downtown Redevelopment Area, and are evaluating methods of financing these improvements.

Septic Usage in the Planning Area

Although much development in the planning area is connected to the CVWD and DWA systems, some development continues to rely on septic systems for wastewater disposal. Homes in the Pioneer Ranch, Dream Homes and Cove neighborhoods, for example, are currently without sewer service. Efforts are underway to connect older neighborhoods and other developed areas that are currently served by septic systems. As mentioned above, the St. Louis Church, located in the Cove, was recently connected to DWA's wastewater collection system, and DWA has indicated that it has sufficient capacity to serve other development in the Cove.

The greatest impacts to groundwater quality are expected to occur where poorly maintained septic systems serve large populations in high densities. Community sewer systems provide excellent protection of groundwater resources, since they provide for the swift removal of raw sewage materials.

Tertiary Treated Water

In response to increasing demands for groundwater supplies in the Coachella Valley, CVWD has implemented the use of tertiary (third-stage) treated wastewater for the irrigation of golf courses and other landscaped areas. Traditionally, wastewater is treated to secondary levels and reintroduced into the groundwater table through percolation ponds.

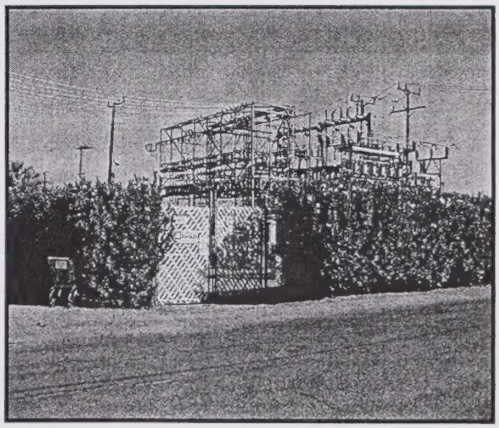
With tertiary treatment techniques, wastewater undergoes an additional stage of treatment, which renders it suitable for irrigation and contributes to water conservation efforts. The Cook Street wastewater treatment plant has a tertiary water capacity of 10 mgd, which is expected to be expanded to 15 mgd in the next few years.

Other Utilities

Electricity

Southern California Edison (SCE) provides electricity to much of coastal, central, and southern California, including the Cathedral City General Plan planning area. SCE derives its power from a number of sources, including cogeneration, geothermal, hydroelectric, solar, and wind sources. Its most important generating facilities are: 1) the San Onofre Nuclear Generating Station (SONGS), a jointly owned project with San Diego Gas & Electric and the cities of Riverside and Anaheim, and 2) the Big Creek hydroelectric system, a complex of hydroelectric facilities located on the western slope of the Central Sierra Nevada Mountains, which comprises approximately 90% of SCE's hydroelectric generation capacity.

SCE offers a wide range of programs which promote energy conservation and help residential and business consumers reduce their electricity costs. These include rebates for customers who install energy-efficient home appliances, air conditioners, insulation, and insulated windows. SCE's Design and Engineering Services department conducts technical analyses to encourage and facilitate the creation and use of new energy-efficient technologies. The company showcases a variety of residential, business, industrial and agricultural energy solutions at seven technology centers, and offers training courses and special events to present these solutions to the public. SCE also provides a number of tools to analyze and improve energy usage habits, such as home and small business energy surveys, which evaluate energy usage and recommend methods for reducing energy costs and consumption. A series of low-income programs provides qualified customers with energy-efficient refrigerators, discounted cooling systems, and weatherization services.



SCE's facilities include high-voltage transmission lines, lower voltage distribution lines, and substations, which "step down" voltage so that it can be distributed to homes and businesses. SCE's transmission system includes high-voltage lines rated at 500, 230, 115, 66, and 55 kilovolts (kV). These lines connect substations and feed into the distribution network serving businesses, homes, and

other electric power customers. Distribution lines are those rated below 55 kV. Electric power is transported to individual homes and businesses from substations through 33 and 12 kV distribution lines. Some distribution lines are supported by wooden poles, while others may be underground.

Within the planning area, SCE's facilities include four substations, major transmission lines, particularly along Date Palm Drive, Landau Boulevard, and Dinah Shore Drive, and distribution lines which carry electricity to homes and businesses. An additional substation, located west of the planning area, may provide service to Cathedral City residents.

SCE has indicated that it will be capable of serving future development in the planning area. According to regulations established by the state and the Federal Energy Regulatory Commission, transmission systems must have sufficient capacity to maintain reliable and adequate service to customers. Planning for future electricity infrastructure involves determining the need for additional facilities, assessing potential environmental impacts, preparing applications for necessary regulatory permits, and regulatory review and approval. SCE performs annual five-year and ten-year growth and service forecasts to assure that its electrical transmission system will be adequate to serve future populations.

Deregulation

In 1998, the State of California implemented legislation that deregulated its power industry. The primary goal of deregulation was to enhance competition in the electric power industry and bring a wider range of choices to consumers. The legislation mandated rate reductions from some electric companies, allowed consumers of large, investor-owned utilities (like SCE) the option to choose alternative electricity providers, and established a statewide Power Exchange where electricity is bought and sold at wholesale prices. Under the current regulatory environment, SCE is precluded from building electric power generation plants or selling any power it generates. Instead, all electrical power generated by SCE is fed into the state's power grid, and the California Independent System Operator (Cal-ISO) regulates its day-to-day distribution.

The legislation froze rates charged by investor-owned utilities at 1996 price levels until no later than March 31, 2002. By winter 2000, a significant price gap emerged between wholesale electricity prices and maximum retail prices that utilities were permitted to charge, with wholesale prices typically exceeding the maximum permitted retail prices. In essence, it became cheaper not to provide electricity to consumers. As a result, many California communities have experienced rolling blackouts to save on the state's power grid. The ISO is responsible for determining when blackouts are necessary. SCE makes every effort to implement blackouts on a rotating basis so that the impacts of power service interruption are distributed geographically. Rolling blackouts last no longer than one hour at each location.

An electric power supply problem exists in California, since the statewide demand for electricity seems to be outstripping the combination of state and interstate supplies. Many interstate suppliers who have sold electricity to California utilities in the past have experienced low winter temperatures and precipitation in recent years, and hydroelectric and other power resources are

not as readily available as they once were. The construction of new power plants in California also appears to be subject to regulatory barriers, including significant state and federal participation in the environmental review process, which makes permitting difficult in some cases. According to SCE staff, the California electric power crisis is expected to last through the summer of 2002. The California Energy Commission and governor are expecting to approve construction of enough new power plants to improve the situation by 2003.

Natural Gas

The Gas Company provides natural gas services and facilities to the City of Cathedral City. The natural gas originates in Texas and is transported to the Coachella Valley through three east-west trending gas lines, which cross the valley just north of Interstate-10 and continue west to Los Angeles. These include one 30-inch line and two 24-inch lines, with pressures of 2,000 pounds per square inch (psi).

High-pressure gas lines are typically steel pipes with pressures greater than 60 psi. Within the planning area, major high-pressure gas lines are located within the rights-of-way of Date Palm Drive, Vista Chino, Varner Road and Mountain View Road. Two high-pressure lines are also located along East Palm Canyon Drive, one on the north side of the street and one on the south.

Medium-pressure distribution lines typically consist of plastic pipelines (older pipes may be constructed of steel) with pressures less than 60 psi. Most residences are fed through pipelines rated at 25 to 40 psi. The Cove and most other residential neighborhoods in the planning area are connected to medium-pressure distribution lines.

Most development in the General Plan planning area is connected to the natural gas system; however, several small pockets of development are not connected and use propane as an alternative fuel source.

Telephone Service

Verizon, formerly GTE California, provides a wide range of residential and commercial telephone services to the City of Cathedral City. Telephone services include local and long distance services, calling cards, business 800 numbers, and voice mail. Verizon also provides state-of-the-art data services such as internet and high-speed DSL data connections.

The backbone of Verizon's communications system consists of central switching offices, which are responsible for the connection of telephone and data transmissions. The City of Cathedral City is connected to three central switching offices located outside the City limits, including the following: 1) on the west side of DaVall Road, north of Gerald Ford Drive in Rancho Mirage, 2) on the southwest corner of Sunrise Way and Amado Road in Palm Springs, and 3) on the east side of Palm Drive at 1st Street in Desert Hot Springs. A smaller, unmanned sub-switching unit, located on the east side of Date Palm Drive south of McCallum Way in Cathedral City, is fed by the Rancho Mirage central switching office. All calls to the City are handled out of these switching stations.

Cable Television

Cable television service is provided to the City through a franchise agreement with Time Warner, which provides its customers with access to approximately 70 channels. The City also has access to Channel 17, a public service channel, which it uses to broadcast City Council meetings.

Access to this channel is not exclusive to Cathedral City, but is shared with other cities in the Coachella Valley. The City is currently consulting with Time Warner to discuss the possibility of having an exclusive public access channel in the future.

In March 2001, digital cable service, which produces high-quality digital pictures and sound, became available in Cathedral City. Customers who lease digital converter channel boxes from Time Warner have access to approximately 180 channels.

In May 2001, high-speed cable-modem data services were offered to customers in the northern portion of the City. With cable-modem services, the computer modem is connected to the cable line, rather than the telephone line. This state-of-the-art service offers numerous advantages to customers: the cable-modem is always turned on and the time needed to connect to the internet is eliminated, it operates at a significantly faster rate than the standard modem, and it does not tie up the telephone line when in use. Time Warner expects to offer these services to the rest of the City by the end of 2001.

Solid Waste Management

Waste Management of the Desert provides solid waste collection and disposal services to the City of Cathedral City through an exclusive franchise agreement. Standard residential pick-up occurs once a week, and commercial pick-up is offered up to six days per week. Additional collection services are offered to large waste generators, such as restaurants and hotels.

Waste Management uses a two-cart automated collection system throughout Cathedral City. Customers are provided with one bin for trash and one for green waste; the bins are lifted and dumped into garbage trucks mechanically. Recyclables are placed in curb-side 18-gallon tubs, which are lifted and dumped manually.

During 2000, a total of 38,974 tons of trash were collected in Cathedral City. Residential and commercial trash collected in the City is stored in "pods," or large containers that function as temporary transfer stations. When the pods are filled, they are transported by truck and dumped at the Copper Mountain Landfill in Wellton, Arizona. The Copper Mountain Landfill receives an average of 900 tons of solid waste per day. It has a remaining capacity of about 200 acres and a future lifespan of approximately 50 years.

Compactor and roll-off waste, including concrete and other bulky waste from construction sites, is disposed of at the Edom Hill Landfill, located on Edom Hill Road east of Varner Road. The Edom Hill Landfill is nearing capacity and is expected to close in 2004.

With the impending closure of this landfill, the City needs to actively plan for and select alternative landfill sites for the disposal of its compactor and roll-off waste. This type of waste typically consists of large, heavy and bulky materials, and the distance it must be transported will be a primary consideration for the City.

The Eagle Mountain Landfill and Recycling Center is planned for construction east of the Coachella Valley, was approved by the Riverside County Board of Supervisors in 1997, and was purchased by Los Angeles County. It is expected to have a total capacity of 708 million tons and a life expectancy of 100 years; however, on-going litigation has delayed its opening. The proposed Mesquite Landfill in Imperial County is expected to have a capacity similar to that of the Eagle Mountain Landfill, but has also been delayed by litigation. Although both of these landfills would be located in relatively close proximity to Cathedral City and may be available to the City in the long-term, their futures remain unclear. A more viable, near-term alternative is the Badlands Landfill, located northeast of the City of Moreno Valley off Highway 60. This landfill is prepared to accept solid waste from the Coachella Valley immediately and is permitted to receive up to 4,000 tons of waste per day.

Recycling

The City's recycling program, mandated by AB 939, has proven beneficial in the preservation of landfill space for non-recyclable materials. During 2000, a total of 3,590 tons of recyclable materials were collected in Cathedral City. This includes 1,532 tons from residential curb-side sources; 570 tons from commercial sources; and 1,488 tons of concrete and other debris from construction sites. Green waste is recycled at BioMass in Thermal. Other recyclables, including glass, plastic and newspaper are transported by a third party hauler to a recycling company in Los Angeles.

FUTURE DIRECTIONS

The logical extension of public services is an integral component of land use planning. The availability of high-quality services is also an important aspect of economic development, and plays an important role in attracting commercial, industrial, hotel/motel, and other revenue-generating development. To assure that public services and utilities meet the needs of the community at buildout, it is essential that the City be actively involved in long-range facilities planning, and routinely consult and coordinate with appropriate public and quasi-public agencies and service providers.

In the near-term, the City will need to concentrate its efforts on pending service issues, including the state-wide energy crisis, the impending closure of the Edom Hill Landfill, and the potential connection of unsewered development to the sewer system. Over the longer term, the City will need to monitor future development in the planning area, particularly on land north of I-10, to assure the logical and cost-effective extension of water, sewer, and other utilities. The City will need to keep abreast of technological advances, particularly in the realm of digital and high-speed data transmissions, to assure that City residents and businesses are offered the most state-of-the-art technologies.

GOALS, POLICIES AND PROGRAMS

Goal 1

Economical utility services and facilities that adequately and safely meet the needs of the community.

Goal 2

A city-wide sewage collection and treatment system.

Goal 3

Conservation of regional and local water resources.

Goal 4

Adequate and reliable utility services for all residents and businesses.

Goal 5

A long-term, viable landfill site, which can accommodate all waste generated in the City.

Policy 1
The City shall encourage CVWD and DWA to implement short- and long-term plans for an integrated, city-wide sewer system.

Program 1.A
Evaluate a wide range of methods to finance the expansion of the sewer system, including assessment districts and a financial assistance program for existing neighborhoods.
Responsible Agency: City Manager's Office; Public Works; Finance Department; Coachella Valley Water District; Desert Water Agency
Schedule: Ongoing

Policy 2
Sewer connection shall be required at the time an individual or infill lot is developed.

Policy 3
Where a residential unit is served by a septic system, at the point of sale, the septic system shall be properly abandoned, and the unit shall be connected to the sewer system.

Policy 4
All subdivisions of ten lots or more shall extend and be connected to sewer lines.

Policy 5
Monitor resource management activities of the CVWD, DWA, and CRWQCB to preserve and protect water resources and quality.

Program 5.A
The City shall support the efforts of DWA and CVWD to construct and expand facilities that treat and distribute reclaimed water.
Responsible Agency: Desert Water Agency, Coachella Valley Water District
Schedule: Ongoing

Policy 6
Major utility facilities, such as well sites and substations, shall be designed and sited to minimize environmental and visual impacts.

Policy 7
Utility lines shall be undergrounded, to the greatest extent practical. Those on major streets and scenic roadways shall have primary consideration for undergrounding.

Policy 8
Prior to the closure of the Edom Hill Landfill, the City shall ensure that its franchise trash hauler has secured an alternate site for disposal of its compactor and roll-off waste, and shall encourage the recycling of such waste whenever possible.

Policy 9
The City shall carefully evaluate the development of alternative energy and recycling facilities , such as power plants and composting facilities, which provide its residents with cost effective options, while adequately protecting the environment.

FIRE AND POLICE PROTECTION ELEMENT

PURPOSE

The provision of adequate levels of fire and police protection is one of the most important and essential functions of local government. It is the purpose of this Element to coordinate the planning of the community with the demand for and availability of these services. The element is also designed to define existing levels of fire and police protection services and to identify the agencies which provide these services. The Element also provides policies and programs that, through their implementation, are essential to in the continued provision of adequate long-term public safety services for the entire community.

BACKGROUND

The Fire and Police Protection Element has a direct and important relationship to several other General Plan elements, including Land Use, Circulation, Emergency Preparedness, Water Resources, Health Services and Community Design Elements. The distribution and intensity of land uses, accessibility, coordination of emergency responses, the availability of water to fight fires and health services to treat the injured, and the provision of "defensible space" in urban development are all tied to the effective provision of fire and police services.

Police and fire protection services are essential to the continued safety of this growing community. The City of Cathedral City provides its own law enforcement and fire department, and maintains cooperative/mutual aid agreements with other communities and agencies for additional emergency response support.

A number of state regulatory codes focus on the importance of addressing the protection of the community from natural and man-made hazards. Government Code Section 65302(g) requires that a Safety Element or its equivalent be included in the General Plan to address measures necessary to protect the community from risks associated with fire and other hazards and threats. Public Resources Code 4125(a) states that the State Board of Forestry shall classify all lands within the State for the purpose of determining hazards and addressing financial responsibility for the prevention and suppression of fires. Unclassified lands fall under the jurisdiction of the City or appropriate federal agency, such as the U.S. Bureau of Land Management or U.S. Forest Service.

Cathedral City Fire Department

The City of Cathedral City operates its own fire and emergency services department, located at 32-100 Desert Vista Road. Fire Department staff includes 33 paid firefighters (including the Fire Chief), 3 administrative personnel, 3 part-time fire inspectors, 10 to 15 reserve firefighters, and 4 code enforcement officers (plus one vacant position)

Current staffing levels represent a ratio of about 0.77 firefighters to every 1,000 residents. The International City/County Management Association (ICMA) recommends a target ratio of 1.89 firefighters per 1,000 residents. Because development in Cathedral City is predominantly low-density residential, with limited light manufacturing facilities, the City has a relatively low fire hazard risk. A ratio of 1.0 firefighters to every 1,000 residents would be adequate at this time; however, the City should strive to increase its staffing level to approximately 1.5 staff members to every 1,000 residents over the next 5 to 10 years. As development occurs north of Interstate-10, the City can reallocate its firefighting staff, as necessary, based on demand for fire services and an assessment of the population and risk hazards in the area.

Three fire stations are located within the City, including: 1) Station No. 411, at 36-913 Date Palm Drive, 2) Station 412, at 32-100 Desert Vista Road, and 3) Station No. 413, at 27-610 Landau Boulevard. The stations contain a wide range of firefighting equipment and vehicles, including three front-line engines, two reserve engines, one state Office of Emergency Services (OES) vehicle, one water tender, four ambulances, and one hazardous materials (HAZMAT) vehicle. One of the front-line engines is a 65-foot telesquirt, and one of the reserve engines is a 50-foot telesquirt. The Department maintains an automatic mutual aid agreement with the City of Palm Springs and a county-wide agreement with the Riverside County Fire Department for additional fire support, as necessary.

National Fire Insurance Organizations and the National Fire Protection Association formally recommend a maximum emergency response time of five minutes. The City Fire Department currently meets this standard. Within the last two years, the Cathedral City Fire Department has been re-certified by the Insurance Services Office (ISO) as a Class 3 Department (Class 1 being the top rating and Class 10 being the worst). The rating recognizes the department's outstanding communications system, the City's high-quality water distribution system, an acceptable staffing model, an excellent emergency response fleet, and the department's ability to respond in a timely and efficient manner. The last rating improved by one point, from a Class 4 to a Class 3. In order to achieve an even better classification, the City will need to build a dedicated Fire Training Center and increase staffing. If development occurs north of Interstate-10 without the construction of a new fire station, the Class 3 rating would be potentially at risk due to longer response times, inadequate staffing based on population, and potential risk hazards associated with the area.

In addition to fighting fires, the Fire Department provides advanced life support and emergency ambulance services, has code enforcement responsibilities, reviews development plans, and performs construction inspections and fire investigations. It also sponsors community fire prevention and public education programs, such as the installation and inspection of fire detectors, and CPR and First Aid courses.

The Fire Department plays a key role in disaster preparedness and is responsible for coordinating, in conjunction with other City departments, the City's response to a wide range of hazards and threats (please refer to the Emergency Preparedness Element for more information about disaster preparedness).

Cathedral City Police Department

The Cathedral City Police Department was created in 1984 and is located in the Civic Center at 68-700 Avenida Lalo Guerrero. The Department is staffed by 55 sworn officers, 29 non-sworn support and administrative personnel, and 6 reserve officers. Reserve officers are required to serve a minimum of 24 hours per month and are usually assigned as the second officer in a patrol car, although they may also transport prisoners or perform other assigned duties. Police vehicles include 35 marked and approximately 15 unmarked cars.

With 55 sworn officers currently, the City currently provides approximately 1.4 officers for every 1,000 residents, which is near the commonly recommended ratio of 1.5 officer for every 1,000 residents. The department anticipates filling approximately 13 additional positions, ranging from police officers to a dispatch records supervisor, by the beginning of fiscal year 2001-02.

Community-Oriented Policing

The Police Department has adopted a Community-Oriented Policing philosophy, which is founded upon a working partnership between the community and police to reduce and prevent criminal activity and to identify neighborhood problems and their underlying causes. The City is divided into three beat areas for the purpose of community-oriented policing. The North Beat area generally extends from 30th Avenue to the northerly city limits, but also includes lands south to Ramon Road between Date Palm Drive and Landau Boulevard.

The Central Beat area generally includes land between 30th Avenue and Dinah Shore Drive. The South Beat area comprises all City lands south of Dinah Shore Drive. Each beat is further divided into three sub-beats, and two police officers are assigned to each sub-beat. The officers primarily function as emergency responders, but also address specific local policing problems, such as traffic control and illegally parked or abandoned vehicles.

Within each beat is a satellite police office, known as a "Community Police Service Office," which is highly visible within the community and easily accessible to the public. The Community Police Service Office for the North Beat is located at 68-100 Ramon Road. The Central Beat office is located at 34-481 Date Palm Drive, near the intersection of Date Palm and Dinah Shore Drives. The South Beat office is located at 69-038 East Palm Canyon Drive.

Each office is staffed by one sworn Community Alliance Officer and volunteer staff, and is supported by six officers who are assigned to the sub-beat areas (described above). Each Community Alliance Officer is responsible for developing a relationship with businesses and residents in his/her beat area, and to be responsive to neighborhood problems and citizen concerns.

Response times can vary significantly, depending on the nature of the incident and the location of patrol cars at the time a 911 call is received. All calls are prioritized, and the response time is contingent on the number of calls pending and their urgency. In 2000, the average response time to a "hot" (emergency) call in Cathedral City, from the time the dispatcher contacted an officer

to the time the officer arrived at the scene, was approximately 4.2 minutes. The average response time to an incident that "just occurred" was also 4.2 minutes.

Community-Based Policing

The Police Department sponsors and supports a variety of community-based policing programs and other special community events. The Neighborhood Watch program educates residents about implementing crime prevention strategies in their neighborhoods. Racing for Kids uses motorcross racing to provides important activities for teenagers, while also serving as a forum for educating vulnerable youth about alternatives to drugs and gangs.

The Police Explorers Program allows teenagers and adults ages 14 to 21 to learn about and participate in a variety of law enforcement functions, including crime prevention support and ride-along programs with officers. One officer is assigned to the D.A.R.E. program and brings a message of drug resistance to school children. The Department also has assigned a School Resource Officer.

The Citizens-on-Patrol (COP) program consists of volunteers who serve as the eyes and ears of the police department and provide two patrols per day. Responsibilities include facilitating towing abandoned vehicles, directing traffic at collision sites, looking for graffiti, and alerting police to potential criminal activity. COPS volunteers also provide support to the Community Police Service Offices and Community Alliance Officers. Volunteers are trained by sworn police officers and attend monthly meetings. The program currently (2001) includes approximately 50 volunteers.

FUTURE DIRECTIONS

As the City continues to grow, so will the need for additional police and fire protection. It is difficult to predict exactly where and when new police and fire facilities will need to be constructed, as this will depend upon the type, location and intensity of future development. Nonetheless, the City will be responsible for monitoring growth patterns and responding to the demand for additional public safety facilities and services. Considerations will include land use and circulation patterns, the provision of water for adequate fire flows, the financing of future fire and police stations, and the adequacy of emergency response times.

GOALS, POLICIES AND PROGRAMS

Goal 1

Protection of the community from the threat of loss of life and property from fire and environmental hazards.

Goal 2

The highest level of security and police protection to preserve and protect the health, welfare and property of residents, visitors and businesses in the City.

Policy 1
All new development proposals shall be thoroughly reviewed for potential impacts and the ability to effectively provide public safety and the provision of fire and police protection.

Program 1.A
The Fire and Police Departments shall evaluate proposals for new development to assure adequate emergency access, the integration of defensible space principles, clear street name signage and numbering, internal circulation, fire flow and other safety design considerations.
Responsible Agency: Fire Department, Police Department, Planning Department
Schedule: Immediate; Continuous

Policy 2
Emergency vehicles shall be provided with adequate access to all new development.

Policy 3
The City shall provide for the adequate and timely expansion of fire and police protection services and facilities to meet future development demands.

Program 3.A
Establish objective criteria, including appropriate minimum response time, the matching of services and facilities to local needs, and the availability of alternative routes to serve target neighborhoods, which assure the optimal siting of future fire and police stations.
Responsible Agency: Fire Department, Police Department, Planning Department
Schedule: 2002-2003

Program 3.B
Evaluate alternative methods of financing the expansion of fire and police services, including developer impact fees, assessment districts, and fire and police permitting fees for development occurring in high security or fire risk areas.
Responsible Agency: Planning Department, Police Department, Fire Department, Finance Department
Schedule: Ongoing

Policy 4
The City supports the highest level of code enforcement practical in order to protect property and lives, property values and quality of life.

Program 4.A
Strictly enforce the Uniform Fire Codes and other applicable building standards in the course of reviewing development plans and conducting building inspections.
Responsible Agency: Fire Department
Schedule: Immediate; Continuous

Program 4.B
Encourage community involvement in code enforcement efforts, including a volunteer neighborhood-based code enforcement program, with specific attention directed toward property maintenance.
Responsible Agency: Fire Department, Police Department, Redevelopment Agency, Planning Department
Schedule: Ongoing

Policy 5
The City shall strive to achieve and maintain a minimum staffing ratio of 1.5 firefighters per 1,000 residents.

Policy 6
The Fire Department shall continue to be responsible for reviewing the City's Emergency Operations Plan on an annual basis and coordinating the revision of the Plan, as necessary.

Policy 7
The use, manufacture, storage and transportation of potentially hazardous materials shall be reviewed and monitored by the City and other appropriate agencies.

Program 7.A
The siting of facilities which use, produce, store, or transport hazardous, flammable or explosive materials shall be conducted in a manner which assures the highest level of safety, in strict conformance with the Uniform Fire Code and other applicable regulations.
Responsible Agency: Planning Department, Fire Department
Schedule: Immediate; Continuous

Policy 8
Essential community facilities shall not be located in areas of high fire hazard risk.

Policy 9
The City shall coordinate with Desert Water Agency and Coachella Valley Water District to assure adequate fire flows for all developed areas in the City.

Program 9.A
Special on-site fire protection measures may be required for development occurring on hilly areas with slopes of 10 percent or greater; such measures shall be specified during project review.
Responsible Agency: Planning Department, Fire Department, Desert Water Agency, Coachella Valley Water District
Schedule: Immediate; Continuous

Policy 10
The City shall apply, to the greatest extent practical, crime prevention principles by integrating them in the project planning process, which results in "defensible space" or high security designs as a means of providing increased security in residential, commercial, industrial and institutional development.

Policy 11
The City recognizes the importance and benefits associated with secured, gated and otherwise security-enhanced communities and development, and the effects that such measures have on reducing crime in the community.

Policy 12
The City shall strive to maintain a minimum ratio of 1.5 sworn police officers per 1,000 residents.

Policy 13
Continue to support community-based policing efforts, including the Neighborhood Watch and Citizens on Patrol programs.

Program 13
Enhance public awareness and participation in crime prevention, and encourage and promote the Neighborhood Watch Program, Citizens on Patrol and other community-oriented policing programs. The City shall develop new and expand existing educational programs dealing with personal safety awareness, such as neighborhood and commercial association watch/protection programs.
Responsible Agency: Planning Department, Police Department
Schedule: Immediate; On-going

SCHOOLS AND LIBRARIES ELEMENT

PURPOSE

The Schools and Libraries Element describes the City's educational facilities, services, resources, and the opportunities made available through the local school and library systems. The Element also helps to anticipate and plan for future needs, and directs decision-makers to assure that adequate and accessible educational facilities are provided to the community. The element also identifies the City's role in planning and siting new school and library facilities, and sets forth policies and programs designed to enhance the educational experience of the City's residents.

BACKGROUND

The Schools and Libraries Element addresses the need for adequate and conveniently located public lands for educational facilities, and therefore is directly related to the Land Use Element. It is also related to the Circulation and Noise Elements, in the City's efforts to protect schools and libraries from excessive noise and traffic. This Element is also related to the Public Building and Facilities Element in its definition and location of existing facilities.

California Government Code Section 65302(a) requires that, among other things, the General Plan assess the general distribution, location and adequacy of educational facilities. Also applicable is State legislation (AB 2926), effective January 1, 1987, which authorized school districts to charge per square foot development fees to fund the construction and reconstruction of public school facilities. The fees are paid by developers directly to the appropriate school district prior to the issuance of building permits. In 2001, the fee for residential development was $2.05 per square foot, and the fee for commercial development was $0.33 per square foot.

Public Education

The Palm Springs Unified School District (PSUSD) provides kindergarten through 12th grade public educational services and facilities to the City of Cathedral City and other communities in the western Coachella Valley. In 2001, PSUSD schools enrolled 21,505 students in 22 schools and an independent study program. PSUSD operates eight schools within the Cathedral City planning area, including four elementary, two middle, one high, and one continuation high school. Many of the District's schools are overcrowded and use temporary, portable buildings for additional classroom space. The District plans to construct additional portable classrooms in several Cathedral City schools over the next several years. The following briefly describes the PSUSD schools located in the planning area.

Agua Caliente Elementary School is located at 30-800 San Luis Rey in Cathedral City and includes kindergarten through fifth grades. The school's maximum capacity is 726 students, and in January 2001 it enrolled 819 students.

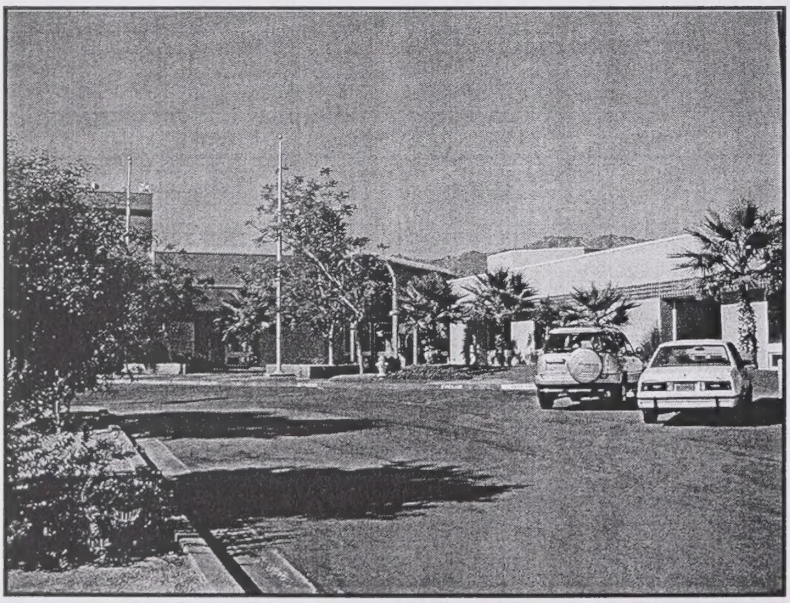
Cathedral City Elementary School is a new school facility located on Converse Road just west of Plumley Drive. It includes kindergarten through fifth grades and operates year-round. The school can accommodate a maximum of 899 students and enrolled approximately 1,029 in 2001.

Landau Elementary School operates on a year-round basis and is located at 30-310 Landau Boulevard. The school includes kindergarten through fifth grades. Although its maximum capacity is 971 students, enrollment in January 2001 was 1,084 students.

Sunny Sands Elementary School includes kindergarten through fifth grades and is located at 69-310 McCallum Way in Cathedral City. The school operates year-round and has a maximum capacity of 966 students. In 2001, the student body included 998 students.

Nellie N. Coffman Middle School includes sixth through eighth grades and is located at 34-603 Plumley Road. The school can accommodate a total of 1,252 students and enrolled 1,036 in January 2001.

James Workman Middle School is located at 69-300 30th Avenue and includes sixth through eighth grades. Although the school has a maximum capacity of 1,222 students, the student body totaled 1,306 students in 2001.



Cathedral City High School

Cathedral City High School, located at 69-250 Dinah Shore Drive, includes ninth through twelfth grades. The school first opened in September 1991. It can accommodate a maximum of 2,673 students and enrolled 2,371 in January 2001.

Mt. San Jacinto Continuation High School is located at 30-800 Landau Boulevard. Approximately 325 students were enrolled in the school in January 2001.

PSUSD has indicated that it plans to build a new elementary school in the Rio Vista area of Cathedral City, in the vicinity of Vista Chino, east of Landau Boulevard. The school will include kindergarten through fifth grades.

The District is currently accepting architecture and construction applications for the school, although specific construction and opening dates have not yet been determined. PSUSD may also construct a new elementary school in the Thousand Palms/Rancho Mirage area in the distant future. This school may support future Cathedral City students but no specific sites or construction dates have been selected.

Private Education

Calvary Bible Christian School is located at 68-550 Dinah Shore Drive and includes pre-kindergarten through twelfth grades. School enrollment averages approximately 100 students. The school can currently accommodate a maximum of approximately 150 students but is anticipating expanding its facilities in the future.

First School of the Desert is located at 69-440 McCallum Way and is licensed to care for children ages 2 to 12. The school provides pre-school, childcare, and kindergarten programs, as well as an after-school program for students attending Sunny Sand Elementary School. Although it is licensed for a maximum of 96 children, only 60 are enrolled at this time. First School of the Desert also operates school facilities in Palm Springs and La Quinta.

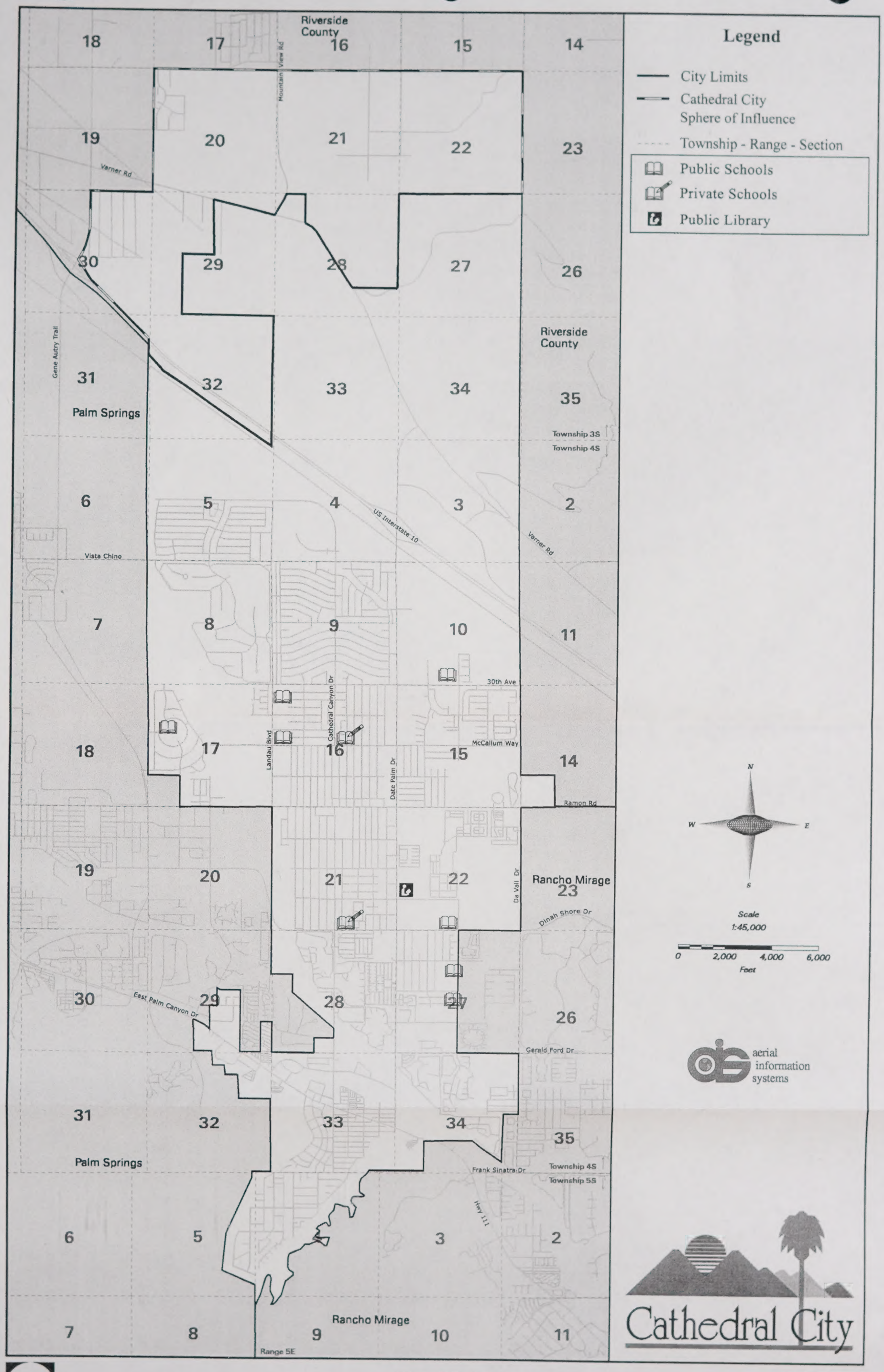
Palm Valley School is located on Dinah Shore Drive, north of Gerald Ford Drive, within the Rancho Mirage city limits, and a short distance from Cathedral City. This school serves students from throughout the Coachella Valley and provides classroom instruction for grades kindergarten through 12. Year 2000 enrollment stands at 280 students, with a capacity for 300. The school is currently undergoing expansion on its master planned campus, which will add a gymnasium, theatre and pool. Following completion of this project, the school hopes to add a high school, which will expand its capacity to 500 students.

Kings School is located on Bolero Road adjacent to Cathedral City limits east of Golf Club Drive. The school serves students from kindergarten through 8th grade. The school has a capacity of 200 students, and a current enrollment of 130. The school is built out at this location.

Colleges and Universities

Regional colleges and universities include the Coachella Valley Campus of Chapman University, College of the Desert, the Coachella Valley Campus of California State University-San Bernardino (CSSB), and University of California-Riverside (UCR) Extension, all of which are located in the City of Palm Desert. CSSB is currently undergoing a major expansion at its new site on Cook Street just south of Interstate-10, which may ultimately become an independent Coachella Valley Campus of the CalState system.

At the southeast corner of Cook Street and Gerald Ford Drive, UCR is also constructing a branch of its Anderson Graduate Business School, to be named the Richard Heckman School of Entrepreneurship. More distant institutions include the University of California-Riverside main campus, California State University-San Bernardino, and the University of Redlands.



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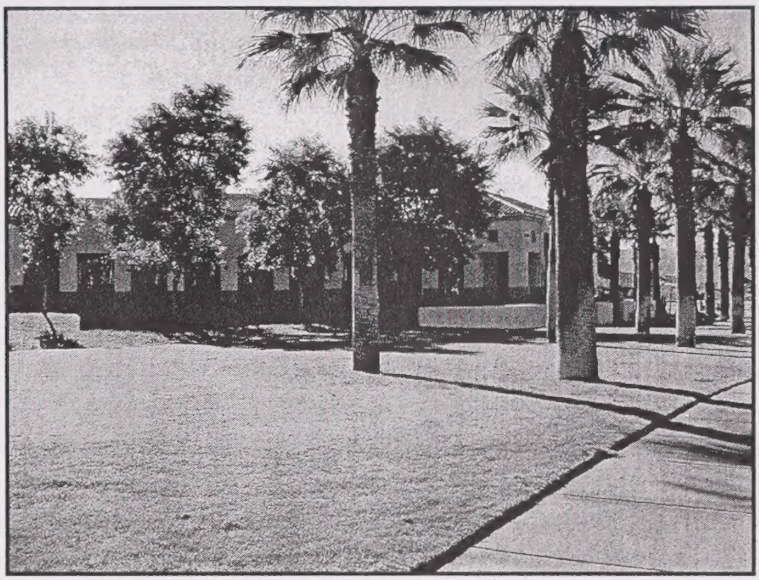
General Plan
Schools and Libraries

Exhibit
VI-1

Library Facilities

The Cathedral City Public Library is a branch of the Riverside County Library System and is located at 33-520 Date Palm Drive, at the southeast corner of Date Palm Drive and Dave Kelley Road. The library, which opened in 1996, consists of a 20,000 square foot facility and contains approximately 70,000 volumes. The library offers a full range of community programs and services, including youth activities, computer facilities and workshops, literacy programs, a community meeting room, and a comprehensive HIV/AIDS information center. An organization known as "Friends of the Library" provides volunteer services and operates a bookstore within the library.

Regional library facilities include the College of the Desert Library in Palm Desert, which is open to COD students and the general public, and includes a state-of-the-art research system. The medical library at Eisenhower Medical Center in Rancho Mirage (lending to non-hospital staff is prohibited) and other branches of the Riverside County Library System are also available for public use.



Cathedral City Public Library

FUTURE DIRECTIONS

The City's schools and library are important community assets and indicators of the community's social health and quality of life. These facilities are also important considerations for many contemplating moving to the City. Schools and libraries are land use sensitive, and their location requires consideration of many factors, including student safety, accessibility, and impacts from excessive noise.

Public school districts are considered "responsible agencies" and have "lead agency" status for the siting, planning and processing development plans associated with their own facilities. While consultation with local jurisdictions is required, most decisions rest with the school districts. Building, planning and design plans are processed and approved by the State Architect's Office. Nonetheless, the City of Cathedral City can assist and coordinate with the local school district and state agencies to assure the provision of adequate educational facilities and services.

The General Plan provides the City with the opportunity to preserve and protect existing and future school and library sites from excessive noise and traffic conditions, and to ensure accessibility and compatibility with surrounding land uses.

GOAL, POLICIES AND PROGRAMS

Goal

The provision of quality school and library facilities in the City that are accessible and conveniently located within the community.

Policy 1
Assist, cooperate and coordinate with the Palm Springs Unified School District and state agencies in identifying, acquiring and developing school sites needed to meet future growth demands. Encourage the selection of potential school sites that are centrally located in areas of existing or future residential development.

Program 1.A
Review PSUSD development proposals and environmental documentation and otherwise coordinate with PSUSD in planning new public school facilities as part of the City's continuing effort to provide enhanced educational opportunities for the community's residents.
Responsible Agency: Palm Springs Unified School District, Planning Department; Economic Development Department
Schedule: Ongoing

Policy 2
Schools and libraries shall be protected from excessive noise and traffic conditions, and incompatible land uses to the greatest extent practical.

Program 2.A
Routinely evaluate and update the Land Use Element to assure that school and library sites are compatible with surrounding land uses, arterial roadways and significant noise generators.
Responsible Agency: Planning Department
Schedule: Ongoing

Program 2.B
The City shall encourage and/or require the use of design and development techniques, such as sound attenuation walls, earthen berms and acoustical insulation in buildings, that mitigate potential traffic and noise impacts on schools and libraries.
Responsible Agency: Planning Department, Building Department
Schedule: Continuous

Program 2.C
To maximum the safety of students, parents, school staff and the general public, the City shall coordinate with the Palm Springs Unified School District to maintain an adequate staff of traffic control officers responsible for monitoring and patrolling roadways immediately surrounding public schools during appropriate school hours.
Responsible Agency: Palm Springs Unified School District, Community Development Department
Schedule: Immediate and continuous

Policy 3
The City shall cooperate in securing school impact fees from developers, in accordance with state law.

Policy 4
The City shall consult and coordinate with the Palm Springs Unified School District to allow the shared/joint use of school open space and recreation facilities.

Program 4.A
The City shall proactively pursue an agreement with the Palm Springs Unified School District regarding the shared purchase, lease, or joint use of land for school and recreational purposes. Provisions shall be made which allow for accessible recreation facilities and open space for the community during non-school hours.
Responsible Agency: Economic Development Department, Planning Department, PSUSD
Schedule: 2002

Policy 5
The City shall support the development and/or expansion of local and regional childcare facilities.

Policy 6
The City shall coordinate with the Riverside County Library System to assure that adequate library facilities, services and resources are provided to meet the educational and literary needs of the community.

HEALTH SERVICES ELEMENT

PURPOSE

The purpose of the Health Services Element is to identify existing health care facilities and services available to the citizens of Cathedral City. It is also designed to ensure that accessible health care options are in place. Accessibility of health care relates not only to physical location but also to affordability and the variety of services and their availability. Availability of high quality health care options contributes greatly to the quality of life within a community, and to the well-being and comfort level of its residents.

This Element also addresses issues associated with the location of new development and its proximity to community health care facilities, which is especially important to the residents of senior, group care or convalescent housing. The City has shown a particular interest in providing accessible medical services and facilities, convalescent facilities and their services, as well as facilities specializing in treatment of medical emergencies.

These include Home Health Care for those patients able to remain home but requiring assessment and treatment by a skilled nurse or therapist; Continuing Care Centers offering sub-acute (long-term) care or specialized intensive medical care for the seriously ill; and Hospice services, including those in the home and caring for the terminally ill and their families.

It is also essential that accessibility to health care in emergency situations be considered, and that land planning, emergency planning and circulation issues be taken into account so that even under extreme conditions citizens can be assured that they will be able to reach, or be reached by, health care and emergency medical professionals. For a more comprehensive discussion of these issues, please see the Emergency Preparedness Element.

BACKGROUND

This element directly relates to other General Plan Elements including Public Buildings and Facilities, Land Use, and Emergency Preparedness. It is also related to the Police and Fire and Circulation Elements. As the City grows, land planning and circulation issues will determine continued accessibility to health services, and the need for planning regarding expansion of these services in order to serve all of Cathedral City's neighborhoods is key.

Hospitals Serving Cathedral City

Cathedral City's location in the upper Coachella Valley positions it between and near two of the valley's major health care providers. Each of these is briefly discussed below.

Desert Regional Medical Center

Desert Regional Medical Center in Palm Springs is operated under a long-term management agreement by Tenet Health Care Corporation. It is a 388-bed acute care hospital, with a 24-hour emergency room and is the only designated trauma center (Level II) serving the Coachella Valley with a staff of specially trained trauma surgeons to offer their aid in the event of major injury. Desert Medical also has a Home Health Care department providing in-home nursing and household maintenance service. Hospice of the Desert has been incorporated into Desert's operations and provides specialized treatment and counseling for the terminally ill.

Eisenhower Medical Center

Eisenhower Medical Center is in neighboring Rancho Mirage and is located on a 90 acre master planned campus. Eisenhower is comprised of a general acute care hospital with 261 beds, the Barbara Sinatra Children's Center, the Betty Ford Center, a well-known substance abuse treatment center, and the Annenberg Center for Health Sciences, a conference and communications center. Twenty-four hour emergency care facilities are also located at Eisenhower, with at least one full-time physician on duty at all times.

A wide variety of outpatient and specialist services are provided by Eisenhower Medical Center, which recently opened a birthing center. Other developments are currently planned, such as the opening of a comprehensive cancer center (see discussion below). Long-term plans include expansion of the emergency room facilities and seismic retrofitting of the main wing.

John F. Kennedy Memorial Hospital, located in Indio, is an accredited community hospital with a 24-hour emergency room and 130 beds, also owned by Tenet Health Care. It offers many programs similar to those offered by Desert Regional Medical Center.

Comprehensive Cancer Centers

Currently, the Center of Excellence at Desert Regional Medical Center provides comprehensive detection, diagnosis, treatment and follow up to cancer patients. It includes physician's offices, a pharmacy, surgical facilities, support services, and research facilities. It also encompasses and is complemented by the Comprehensive Breast Center, which offers a range of breast health services, including diagnostic and treatment services. Eisenhower Medical Center recently purchased the Heart Institute of the Desert facility and is retrofitting the building for an "under-one-roof" approach to cancer care. The Eisenhower Comprehensive Cancer Center is set to open in early 2002.

Immediate Care Clinics

Two immediate care facilities serve Cathedral City. Centro Medico de Valle is located at Date Palm Drive and Ramon Road. One physician and a physician's assistant staff it during hours of operation. The private clinic has entered into a relationship with Eisenhower Medical Center whereby Eisenhower provides the clinic's rotating staff of physicians. In addition to regular medical services offered to insured and self-pay clients at a reduced rate, the clinic offers the Healthy Beginnings Program for infants and new parents (see discussion below). It also provides

free physicals for children up to age 18 and free breast exams and mammograms for income-qualified patients.

Eisenhower Medical Center Immediate Care and Occupational Health Clinic

The Eisenhower Immediate Care Center is located on East Palm Canyon Drive just east of Palm Springs. It is staffed during hours of operations by two physicians and at least one support medical staff, which may include a physician's assistant or a nurse practitioner. Services include occupational health screening and physicals, and urgent care for individuals needing immediate treatment for injuries or illness. This immediate care center is owned and operated by the Eisenhower Medical Center in Rancho Mirage.

Special Services

The Desert Aids Foundation, an education and prevention program, is located in Palm Springs and serves clients throughout the Coachella Valley. It is the region's primary provider of services to HIV-affected persons. The Foundation provides a range of services including home health care, anonymous HIV testing, and financial, legal, nutritional, re-employment, substance abuse and psychological counseling. Clients may also apply for housing assistance, child care, dental referrals and other services.

Through Desert Regional Medical Center and JFK Hospital, the "Healthy Beginnings" program is offered in Cathedral City at the Family Medical Clinic located at the Date Palm/Dinah Shore Drive intersection. Health Beginnings is a low-cost program offering pregnancy testing, assistance with enrollment in Medi-Cal and Healthy Families Insurance programs, pre-natal and parenting classes and counseling. Incentives are offered to encourage follow-through with doctor's appointments.

The "Desert Health Car," a fleet of vans sponsored by the Desert Health Care Foundation, provides free transportation to parents needing such assistance. The Healthy Beginnings program is funded through the State Department of Health.

Centro Medico de Valle near Date Palm Avenue and Ramon Road. Offers Healthy Beginnings and Urgent Care Service

The Desert Health Care Foundation is a non-profit organization, formerly a part of Desert Regional Medical Center, and now an independent foundation administering matching funds provided to Desert Regional Medical Center by the State Department of Health's Desert Health District. Funds provide programs such as free mammogram screenings to women who qualify either by income level or uninsured status. They also fund the Desert Health Car, which in addition to serving the Healthy Beginnings Program, is available at no charge to western Coachella Valley residents needing transportation to medical or dental appointments.

The Foundation's Tiempo de los Ninos auxiliary funds the Smile Factory, a 52-foot long "mobile dental unit" which travels to Palm Springs Unified School District schools, including Cathedral City schools. Kindergartners through 5th graders who qualify for the school lunch program are also eligible for dental screenings and treatment through the Smile Factory. Staffed by an administrator, dentists, dental assistants and hygienists, the Smile Factory operates throughout the year-round school year.

Canyon Springs, a licensed intermediate care facility serving developmentally disabled individuals, admitted its first client in December of 2000. It is located just west of the Da Vall Drive /Ramon Road intersection. This state-run facility is licensed for up to 63 clients. It offers intermediate-level nursing care to adult individuals with mental retardation, autism, cerebral palsy or seizure disorders. Clients are referred through a regional center and receive job and other skills training, with the goal of moving them into less structured group homes or other more independent-living settings. This facility allows clients with mild to moderate developmental disabilities to be closer to their families in Southern California. Some of its clients are from the Coachella Valley. It is the only such specialized facility in Southern California.

Substance Abuse Facilities

A variety of residential substance abuse treatment facilities are located in surrounding communities, most notably Palm Springs, Rancho Mirage, Indio and Desert Hot Springs. These include The Ranch, a 46-bed facility serving male alcohol and drug treatment clients. The corresponding treatment center for women is Hacienda Valdez, operating 35 beds. Both are located in Desert Hot Springs. . The Soroptomist House of Hope offers 90-day residential drug and alcohol treatment programs for up to 5 women at each of its locations in Banning and Desert

Hot Springs. House of Hope also has a 4 person short-term re-entry facility for women who have completed a 60-90 day residential treatment program. Life's Journey, licensed for 30 beds and serving both male and female patients. The Betty Ford Center in Rancho Mirage is a residential substance abuse treatment center for both men and women. The ABC Recovery Center in Indio has 8 beds, and transitional housing.

The Riverside County Department of Health Services/Cathedral Canyon Clinic is located on Perez Road in Cathedral City. It provides outpatient mental health services for children and adults, and substance abuse services for adolescents and adults. There is also a 3-day, 16-week program for pregnant or parenting women. Mental health services intake is provided through the State's clinic in Indio and through referrals from local schools; substance abuse and other services are initiated at the Cathedral Canyon Clinic. Fees are based on a sliding scale. The clinic serves residents of the Coachella Valley from Rancho Mirage west to Palm Springs and north to Desert Hot Springs.

Senior Services

The Cathedral City Senior Center, located on East Palm Canyon Drive in downtown Cathedral City offers weekly blood pressure checks and a menu of monthly health screenings for seniors, all staffed by volunteer registered nurses. Screenings are at a reduced fee for all seniors, whether members of the Center or not. Annual flu shots are provided at no cost. A variety of health and fitness classes are also offered at nominal fees.

Hospice Care

Two providers of home-based hospice services have offices in Cathedral City. Trinity Hospice is privately owned and funded. Hospice services, staff and equipment are delivered to patients in their homes. The firm currently serves approximately 30 patients per day with a capacity of 75 per day. This provider has the largest capacity for delivery of hospice care in the low desert area. The Trinity Hospice Foundation provides funding to assist patients without insurance coverage for these services.

Vitas Healthcare Corporation, a large, national corporation with a regional office in San Bernardino, maintains a small satellite office in Cathedral City. Services are delivered to patients in-home or at other facilities where they are currently living. Most patients served are Medicare insured. Also see the discussion above regarding the Hospice of the Desert program at Desert Regional Medical Center.

Accessibility and Transportation

In addition to the Desert Health Car, discussed above, transportation to routine medical and dental appointments is available to valley residents via SunLine operated "Sun Dial" buses. Pre-appointments are available for such services and they are provided at no charge to qualifying riders.

Medical transport available to Cathedral City residents are the Cathedral City Fire Department EMS vehicles, and American Medical Response (AMR), a private ambulance company based in Palm Springs. For inter-facility transfers, AMR, Balboa and Bowers ambulance services are available. For more information on emergency transport services, please refer to the Emergency Preparedness Element.

FUTURE DIRECTIONS

Medical services located in the City tend to be grouped in one of three areas: near the Ramon Road/Date Palm intersection; near Date Palm Drive and Dinah Shore Drive; and near the Cathedral City downtown area, on Perez Road or on Highway 111 (East Palm Canyon Drive). Residents of neighborhoods north of Ramon Road must travel outside their neighborhoods for services.

The City should consider encouraging the establishment of a medical center complex in the northern planning area, which could include general/family medicine, obstetrics/ gynecological services, pediatrics, internists, dental and vision care in a "one-stop shopping" facility. Such a facility could be housed in an existing commercial center or small office complex, as are many of the existing clinic facilities.

Residents must travel outside Cathedral City to obtain some comprehensive and many very specialized health services, such as MRI screenings, although distances to these services are not great. Locating small satellite offices providing comprehensive breast care, cancer screening, heart-care related fitness and wellness facilities, preventative medicine in some City neighborhoods may be encouraged. While affiliated with the larger hospitals, these "neighborhood health stores" would encourage utilization by near-by residents and also might attract other valley residents who prefer to visit a more convenient site as opposed to a large hospital campus.

The City may also wish to consider providing inter-facility transport service through the Fire Department in the future, based on growth and economic conditions.

GOAL, POLICIES, AND PROGRAMS

Goal

A variety of high quality health care facilities which provide City residents accessible, affordable services, promoting their health and well-being.

Policy 1
Encourage the establishment of additional health services accessible to all planning area neighborhoods.

Program 1.A
The City shall consult with local providers to discuss the feasibility of locating at least one medical clinic or group of clinics within a self-contained setting in the northern planning area.
Responsible Agency: Economic Development Department, Desert Regional Medical center, Eisenhower Medical Center
Schedule: 2002; On-going

Program 1.B
If deemed feasible, the City shall offer incentives to local providers to locate a medical clinic or group of clinics in the northern planning area.
Responsible Agency: Economic Development Department; City Council; Desert Regional Medical Center, Eisenhower Medical Center
Schedule: 2002; On-going

Program 1.C
As feasible, the City shall facilitate the placement of congregate care facilities and facilities for developmentally disabled persons in accessible locations throughout the City.
Responsible Agency: Economic Development Department; City Council; providers of congregate care and developmentally-disabled care
Schedule: 2002; On-going

Policy 2
Encourage the establishment of neighborhood satellite offices within Cathedral City with the purpose of offering specialized and comprehensive care services in a neighborhood setting.

Program 2.A
The City shall consult with Desert Regional Hospital and Eisenhower Medical Center to discuss the feasibility of locating such neighborhood satellite offices in various locations.
Responsible Agency: Economic Development Department; Desert Regional Medical Center, Eisenhower Medical Center
Schedule: 2002; On-going

EMERGENCY PREPAREDNESS ELEMENT

PURPOSE

The Emergency Preparedness Element provides information on emergency response services and plans currently (2001) in effect, outlines critical facilities and services necessary to respond adequately to emergencies, and discusses potential impacts of natural and man-made threats which could significantly affect the City. Finally, the Element sets forth the goals, policies and programs that have been, or will be, developed by the City to ensure adequate preparation for such emergencies. Its inclusion is also designed to provide the City of Cathedral City with information, which it can use to plan responsively in order to minimize human and economic losses.

BACKGROUND

This Element is included as part of the overall discussion and planning regarding general environmental hazards, in accordance with Government Code Section 65302(g) which mandates that General Plans address hazards such as seismic disturbances and their effects, "other geologic hazards ... flooding; and wild land and urban fires." The Emergency Preparedness Element is related to other general Plan elements, including Health Services, Police and Fire protection, Flooding and Hydrology, Circulation, Land Use, Hazardous and Toxic Materials, and Economic Development Elements.

The northern portion of the City of Cathedral City is crossed by the San Andreas Fault, one of the most active faults in California, and is vulnerable to seismically-induced ground shaking, ground rupture, slope failure, rockfalls and landslides, ground subsidence and soils liquefaction. These seismic hazards, as well as fires, flooding, and hazardous materials releases all require emergency planning. The potential for man-made emergencies, such as power outages, major accidents involving trains, motor vehicles or aircraft, also exists. Emerging concern over urban terrorism, sparked by events such as the Oklahoma City Federal Building bombing, and increasing incidents of school shootings, may also necessitate an emergency response plan.

Cathedral City is a member of the Riverside County Emergency Services Organization. The City has developed its own Emergency Operations Plan to anticipate and comprehensively plan for a variety of man-made and natural disasters, which could potentially expose residents and property to harm. The Plan utilizes the Standardized Emergency Management System (SEMS), which categorizes various activities necessary to prepare for or mitigate potential disasters, and assigns responsibility for managing and implementing those activities to the appropriate City department or entity.

By means of 15 separate but integrated planning documents, which function as area-specific sub-component summaries and response plans, the Plan further details specific actions to be taken in the event of each emergency and which agency or City entity would handle the action. Of these summaries, the first, Emergency Management, which includes Emergency Operations Center (EOC) management and operations, is complete.

Other summaries and response plans still to be completed will cover communications, mutual aid functions between fire and police agencies, public health operations, communications, care and shelter operations, and damage assessment and recovery, as well as other vital areas of emergency operations. Although under development, the Plan in its entirety will remain a "living document", with on-going updates and improvements. The Cathedral City Emergency Operations Plan is hereby incorporated by reference into this Element.

Critical Facilities

Critical facilities such as hospitals, police and fire departments, governmental operations, communications centers and utility facilities form a vital network functioning to implement the plan in the event of an emergency. Support facilities, such as fire and police communications, auxiliary personnel and commercial radio stations, can support the primary critical facilities by providing information and direction to the public during a crisis. The City also relies on the Radio Amateur Civil Emergency Services (RACES) organization for amateur radio communications county-wide during a disaster.

Access, including evacuation routes and transport of the injured, peak-load water supply and delivery, and airport services must also be considered. It is important to take into account transportation system constraints, which may hinder ground-based access or delivery of supplies and emergency services to the affected areas.

Coachella Communications Group (COACHELLACOMM) comprises the Coachella Valley's arm of a network of seven regional committees mandated by Riverside County. This network was formed to deal specifically with disaster preparedness. Coachella Valley cities' Emergency Managers or other designated representatives, as well as Safety Officers from at least two of the area's major hospitals, serve on this committee. The County's Emergency Operations Coordinator is the current committee chair.

Shelters must be available which are capable of handling large numbers of people and providing basic services such as food, potable water and medical supplies. In the event of an emergency involving Cathedral City, shelters would be set up and managed by the American Red Cross. In addition, the City has been actively purchasing disaster support supplies as part of its Disaster Medical Assistance Center (DMAC), which has been located at the intersecting corner of the Big League Dreams and Cathedral City High School football stadium. When activated, the DMAC is stocked to provide care to between 300 and 500 persons. Any necessary transport of injured persons would be coordinated between the appropriate emergency transport provider, City and County EOCs, and area hospitals.

In the past, many of the City's private residential communities participated in the Neighborhood Emergency Service Team (NEST) program and received preparedness, response and recovery operations training. NEST has been replaced by the Community Emergency Response Training Program (CERT), which is designed to help such communities prepare to be self-sufficient for a period of at least 72 hours following an emergency. Such preparedness optimally includes emergency stockpiles of food, water and other needed supplies. While some of the City's communities are believed to have such stockpiles, neither levels of preparedness nor participating communities are documented.

CERT training is currently offered on a quarterly basis through a valley-wide, consolidated training program. The City does not currently schedule training for individual communities but is willing to do so if requested.

Emergency Accessibility and Transportation

Immediate access to impacted areas by emergency personnel and supplies is essential after a disaster. East Palm Canyon Drive, Dinah Shore Drive (Mid-Valley Parkway), Ramon Road and US Interstate-10 are major intercity and regional access routes serving Cathedral City. These arteries could be blocked or damaged in the event of a major disaster, including major earthquakes or floods, urban wildfires, major truck or rail accidents, or by other natural or man-made disasters. The loss of freeway overpasses, bridging over the Whitewater River, or the closing of roads due to rockfalls or landslides would each impede the delivery of emergency services and supplies.

The City is generally well protected from major flooding by the extensive drainage channels built through it and adjacent to the Santa Rosa Mountains. All-weather crossings over the Whitewater River at Date Palm Drive, Ramon Road and Dinah Shore Drive, and where East Palm Canyon Drive crosses the East and West Cathedral Canyon Washes are in place.

Other parts of the City and General Plan study area are susceptible to major flooding and possible isolation from major transportation links and the rest of the community. Lands at the west end, and north and south of East Palm Canyon Drive, are located in an AO flood zone, with the possibility inundation at depths of one to three feet. In the northern portion of the City, lands north and south of I-10 are also susceptible to major flooding, which could isolate these lands from emergency services (also see the Flooding and Hydrology Element).

The City shall continue to coordinate with CalTrans, the Federal Highway Administration, CVAG, adjoining cities and Riverside County, as well as Sunline Transit Authority, to provide the highest functional reliability of major roadways and the public transportation system serving the City and the region. The City shall also continue to coordinate with Riverside County Flood Control, the Coachella Valley Water District and the Federal Emergency Management Agency (FEMA) to address continuing flooding hazards that threaten people and property, and which may isolate portions of the community. Programs shall be developed to identify and address weak links in the circulation system, in conjunction with the efforts of other Coachella Valley jurisdictions.

Emergency Medical Facilities

Emergency medical services are provided by the City of Cathedral City Fire Department, which can provide paramedic services on-site and during emergency transport. Backup services are provided by American Medical Response, which maintains a ring-down communication line with City Fire Department dispatchers and has ambulances staffed with Emergency Medical Service personnel (paramedics). AMR can link with California Highway Patrol to provide airlift capabilities based out of the Thermal Airport, and with Mercy Air, which operates out of Banning. The Palm Springs International Airport is located within 5 miles of most portions of Cathedral City and provides an important access point to the western Coachella Valley for helicopter and fixed-wing aircraft.

There are three valley hospitals that can provide care and personnel in the event of an emergency. Most notably, Desert Regional Medical Center in Palm Springs is a 388-bed acute care hospital and is a designated trauma center. Eisenhower Medical Center in Rancho Mirage includes a general acute care hospital with 261 beds and emergency medical facilities. A third hospital, located in Indio, is the John F. Kennedy Memorial Hospital, an accredited community hospital with a 24-hour emergency room and 130 beds. (Please see the Health Services Element for more information on these hospitals). Should an emergency occur, the designated Emergency Services Coordinator will contact and coordinate with these emergency medical service providers.

The Cathedral City Emergency Operations Center

Emergency Operations Center

The City of Cathedral City Emergency Operations Center (EOC) is located at Fire Station 412 at 32100 Desert Vista Road, just south of Ramon Road. As outlined in the City's Emergency Operations Plan, adopted in May, 2000, in the event of an emergency the EOC would be activated and serve to coordinate the Standardized Emergency Management System (SEMS), "to organize response to the emergency or disaster, incorporating the functions, principles and components of ICS (i.e., unified command, action planning, span of control, hierarchy of command, etc.)" The City Manager is designated to serve as Director of Emergency Services.

Emergency Response & Organizational Structure

Cathedral City's emergency entities, including Fire and Police services, cooperate with other valley cities and the County on an on-going basis. In the event of a local or valley-wide emergency, such cooperation becomes essential to provide continuity of basic services and to manage large-scale emergency operations. While the City's Emergency Operations Plan addresses management functions of mutual aid, the hazard summary and response documents, which specify mutual aid field responses and strategies, are still to be developed. The City places development of these documents as a high priority. It is essential that coordination of mutual-functioning responses between valley cities, Riverside County, and the State of California are clearly defined and ready for implementation.

State and national organizations, such as the Red Cross and the National Guard, have specific roles in emergency management. The Red Cross, as mentioned in the Critical Facilities section of this Element, has primary responsibility for establishing and managing emergency shelters. The State National Guard will primarily serve as a peace-keeping or security force, unless required to function otherwise by an emergency declaration by the President of the United States. Should a large-scale regional or state-wide emergency require airlifting of stable injured individuals out of the State to make room for more severely injured, less mobile persons, the National Guard has the capability to provide that service.

Implementation of a plan in accordance with State and County requirements, and documentation steps followed in an emergency, are important to allow the City to recover costs associated with emergency management. Therefore, planning becomes crucial in accessing funds available for such emergencies and for safeguarding the City's on-going financial resources after an emergency has occurred.

FUTURE DIRECTIONS

It is unclear whether private residential communities whose members previously received NEST training have since become involved in CERT; it is also unclear how such communities within the City would now be self-sufficient for a minimum of 72 hours following an emergency. Therefore, in order to maximize critical facilities available to residents, the City should consider a more systematic approach to implementing the CERT program in gated communities that would allow it to quantify and readily identify participating and non-participating communities. This approach should also focus on developing and implementing a public information campaign targeting these communities, and should actively encourage their involvement in CERT training.

The Emergency Operations Plan implements the Emergency Preparedness Element. When completed, the Plan will provide detailed organizational directives, scopes of responsibilities, operational priorities, authority and powers, emergency communications protocols and, in summary, the comprehensive framework for effective emergency response. The City has begun the process of planning for a variety of contingencies and has in place a solid foundation for emergency preparedness.

It is very important that this process continue, that remaining components are completed, and that the Plan remain adaptable to all. Although the Emergency Preparedness Plan will remain a living document, baseline information provides a valuable structure for refinement and expansion of emergency preparedness efforts.

GOAL, POLICIES AND PROGRAMS

Goal

A detailed, integrated and effective emergency preparedness plan for the City ensuring a high level of readiness and responsiveness to man-made and natural disasters of any scope, and which maximizes response capabilities of the City, County, State and Federal governments.

Policy 1
The City shall give priority to completion of all hazard summaries and responses of the Emergency Operations Plan.

Program 1A
The City shall expedite scheduling and completion of the remaining fourteen (14) operations plans addressing fire protection, law enforcement, communications, public health, damage assessment and other emergency response parameters of Emergency Operations Plan.
Responsible Agency: City Manager, Fire Department, Police Department, All Other City Departments
Schedule: Immediately; on-going

Policy 2
The City shall maintain and update the Emergency Operations Plan to keep it updated with staffing and technical capabilities of the City and cooperating agencies.

Program 2.A
Periodically schedule and direct the review and revision of the Emergency Operations Plan and all completed Hazard Summaries and Responses.
Responsible Agency: City Manager, Fire Department, Police Department, Riverside County Emergency Services, Other City Departments
Schedule: Annually

Policy 3
The City realizes that aspects of the physical and urban environment pose potentially significant hazards and shall take proactive steps to minimize these threats to the community's residents, visitors and economy.

Program 3.A
The City shall evaluate the full range of physical constraints to the effective implementation of the Emergency Operations Plan, shall develop a strategic plan to address and minimize the effects of these constraints, and shall periodically report to the City Council on progress made in addressing these constraints.
Responsible Agency: Public Works Department, Fire Department, Police Department, Riverside County Emergency Services, Other City Departments
Schedule: Immediately; Annual Report

Program 3.B
The City shall coordinate with responsible flood control agencies and shall jointly develop long-term strategies and capital improvement plans that, to the extent practical, eliminate or minimize significant flooding hazards which threaten lives, property and emergency access.
Responsible Agency: Public Works Department, County Flood Control, CVWD
Schedule: 2002-03; Update every five years

Program 3.C
The City shall ensure that responsible domestic water providers comply with State requirements for water storage and distribution systems to withstand strong groundshaking and other seismic hazards.
Responsible Agency: Public Works Department, Desert Water Agency, CVWD
Schedule: 2002-03

Policy 4
The City shall identify and establish emergency evacuation and supply routes and plans to preserve or reestablish the use of East Palm Canyon Drive, Dinah Shore Drive, Interstate-10 and other essential transportation routes.

Program 4.A
Establish and appoint a staff liaison with adjoining cities, Riverside County, CVAG and CalTrans to facilitate the designation of emergency evacuation and supply routes, and for the development of a multi-agency emergency response plan that provides expeditious and timely repair to major streets and highways damaged by earthquakes, flooding or other disasters.
Responsible Agency: City Manager, Public Works Department, Cities of Palm Springs, Rancho Mirage and Desert Hot Springs, Riverside County Emergency Services, CalTrans, CVAG
Schedule: 2002; Continuous

Policy 5
Formal lines of communication shall be established and maintained between the City and the US Geological Service and/or the California Institute of Technology to assure the provision of earthquake predictions that may impact the City and surrounding area.

Program 5.A
The City shall contact Caltech and the appropriate office of the US Geological Survey and shall establish a liaison and procedures by which these organizations contact and inform the City of earthquake predictions that may affect the community.
Responsible Agency: City Manager, Fire Department, Police Department,
Schedule: 2002; Continuous

Policy 6
The City shall cooperate and coordinate with Riverside County Emergency Services, local utility purveyors and other agencies and utilities in the preparation of public information materials to assist residents, visitors and business owners in responding to local disasters and emergencies.

Program 6.A
The City shall coordinate and cooperate with County Emergency Services, Desert Water Agency, CVWD, Southern California Edison, Southern California Gas, and other agencies and utilities in the development and dissemination of information and instructions on appropriate actions in the event of a local disaster or emergency.
Responsible Agency: City Council, City Manager, Fire Department, Police Department, Riverside County Emergency Services, SCE, SCG, DWA, CVWD
Schedule: 2002; Continuous

Program 6.B
Coordinate with local schools and appropriate public and quasi-public agencies to assure that a public information program is developed and broadly implemented to advise the community on how to prepare for and cope in a local disaster or emergency.
Responsible Agency: City Council, City Manager, Fire Department, Palm Springs Unified School District
Schedule: 2002; Continuous

Policy 7
The City shall thoroughly consider and assess vulnerability to natural and manmade disasters or emergencies when reviewing proposals for the siting and development of critical and essential public/quasi-public facilities.

Program 7.A
In order to assure the maximum possible protection from environmental and manmade hazards, including earthquakes and flooding, the City shall consider their vulnerability to natural and manmade disasters and emergencies when reviewing proposals for critical and essential facilities, as well as sensitive land uses.
Responsible Agency: Planning Department, Public Works Department, Fire Department, Police Department,
Schedule: Continuous

Policy 8
Where feasible, the City shall encourage the development of critical facilities within private residential communities in order to ensure the preparedness and safety during periods of disaster which may limit accessibility and resources.

Program 8.A
Coordinate with local gated communities to train and educate residents, and then to implement, develop and maintain emergency preparedness plans and stockpile supplies, in accordance with the CITIZENS EMERGENCY RESPONSE TEAMS (CERT) program, to ensure their self-sufficiency for a period of at least 72 hours following an emergency or disaster.
Responsible Agency: City Council, City Manager, Fire Department, gated communities.
Schedule: 2002, Continuous

Program 8.B
Develop and maintain a record-keeping system indicating which gated communities have participated in the CERT training, and communicate with those communities on an annual basis to schedule training updates.
Responsible Agency: Assistant City Manager, Fire Department, gated communities.
Schedule: 2002, Continuous

Program 8.C
Develop a public information and awareness program targeting gated communities, actively encouraging participation and annual training updates.
Responsible Agency: Assistant City Manager, Fire Department, gated communities.
Schedule: 2002, Continuous

PUBLIC BUILDINGS AND FACILITIES ELEMENT

PURPOSE

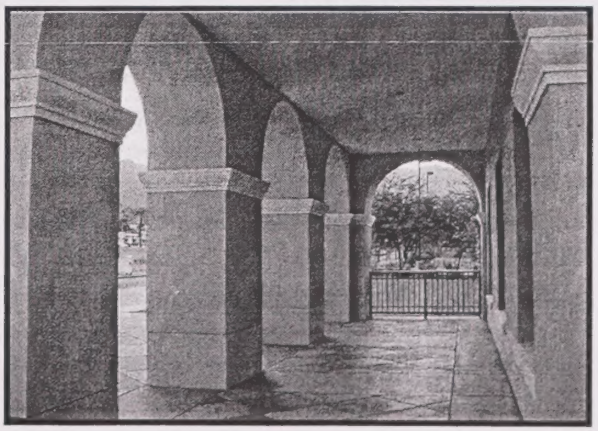
This Element describes and provides background information on the various public and quasi-public facilities and structures in the City. It is intended to provide sufficient information to identify important structures and to assure that adequate facilities are provided to meet the demands of the growing community. The element is also meant to provide sufficient information to identify issues associated with these important and critical facilities. Implementation of the element will help to assure coordinated planning and development. The Element also sets forth goals, policies and programs, which address the City's long-term planning needs.

BACKGROUND

The importance of coordinated planning, funding and operation of essential public facilities is clearly recognized by state, county and local jurisdictions. Government Code Section 65103(c) states that the planning agency is to "annually review the Capital Improvement Program of the City or County and the local public works projects of other local agencies for their consistency with the General Plan…" Furthermore, according to Government Code Section 65303, the local jurisdiction may emphasize the importance of this issue by requiring an optional Public Facilities Element in the General Plan

The Public Buildings and Facilities Element is directly related to the Land Use Element, which assigns land use designations and assures that adequate and optimally planned lands are available for existing and future public buildings and facilities. It is also related to the Circulation Element, which is directed at providing efficient, safe transportation corridors throughout the City, and especially to essential public facilities. The Community Design Element, which sets forth the architectural and design criteria to be used throughout the community, is responsive to occasional aesthetic issues that arise with the siting and construction of these buildings and facilities.

The City contains a number of public buildings and facilities, ranging from the Civic Center to schools and libraries, fire stations, post offices and other public buildings, as well as telephone and cable transmission lines.



Civic Center's Archways

City and utility maintenance yards and facilities, roads, bridges and traffic signals also fall into this category. Advance planning for public facilities assures that they are built in time to accommodate existing and anticipated future needs of the community. Some, most notably utility infrastructure, play a key role in determining the location, intensity and timing of future development. Most of these facilities are shown on the General Plan map included in this element.

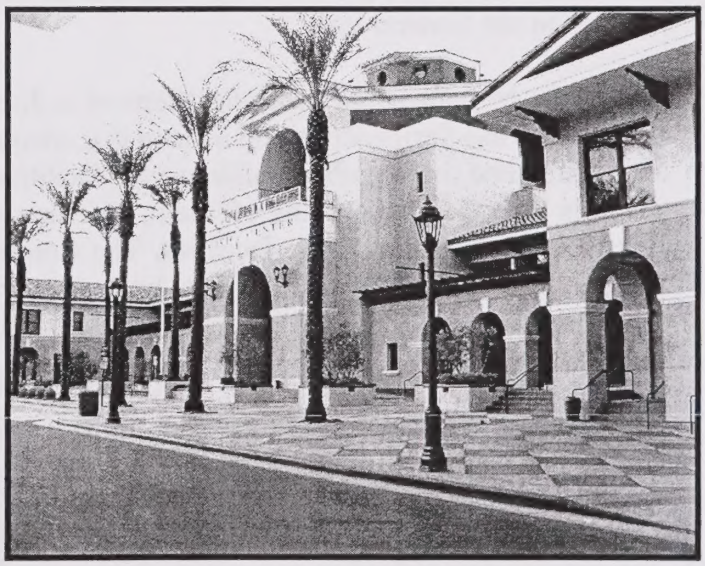
The location of public buildings and facilities is largely based on their function in the community. These functional criteria should not preclude the logical and sensitive integration of these facilities into the City's existing and planned land use patterns. Fire and police stations, for example, should be strategically located throughout the community so as to provide optimal emergency response times. Public office buildings in which residents and City officials conduct business should be conveniently located, with safe public access and adequate parking. Electrical substations, water wells, and other utility infrastructure can be effectively screened from public view and aesthetically and cost-effectively integrated into the natural and built environment.

Public Buildings and Facilities

Civic Center

The City has made a substantial commitment to the redevelopment of its downtown. The Civic Center, which houses City Hall and the Police Station, is located at 68-700 Avenida Lalo Guererro, and serves as an important civic monument and community focal point in the heart of the downtown district. The building is designed on a grand scale with strong neo-classical architectural features. It overlooks a public plaza, which showcases several art sculptures and a fountain courtyard; this space serves as a dynamic and beautiful community-gathering place for important civic and other community functions.

The building opened in July 1998 and encompasses approximately 65,000 square feet. It houses the Police Department and city staff and administrative offices, including the Mayor's office and City Council chambers. As part of the downtown redevelopment effort, the City has constructed a multi-level parking structure immediately west of City Hall, providing parking for theater-goers, shoppers and other visitors to the downtown. This structure opened in Spring, 2001.



The Cathedral City City Hall Building

Corporate Yard

The City's corporate yard is located at 68-385 Kieley Road, near Cathedral Canyon Drive. The facility includes two masonry buildings, which comprise a total of approximately 8,500 square feet. One building serves as a vehicle maintenance garage/workshop, and the other includes staff

offices for the Public Works Department and warehousing space. The remainder of the site consists of an asphalt parking lot, which accommodates staff and City-owned vehicles. City staff has indicated that additional parking space is needed and that the corporate yard may be expanded in the future.

Cathedral City Community Center

The Cathedral City Community Center is fully funded and operated by the City's Parks and Recreation Division. It is located at 68-727 E. Palm Canyon Drive and occupies approximately 10,000 square feet in two buildings: the City-owned community center building, and the old library building, which the City leases from Riverside County. The Senior Center, described below, occupies an additional 3,000 square feet of the Community Center building.

The Community Center offers a wide range of community programs and activities, including day camps, dance and tumbling programs, karate lessons, bridge clubs, and seasonal/holiday festivities. Large and small meeting rooms are available to scouts, clubs and other community groups.

City staff has identified the need for a new, larger community center in the northern portion of the City. Proposed programs and facilities would include more adult and evening classes, a day care program, and a gymnasium, swimming pool and/or other recreational facilities.

Cathedral City Senior Center

The Cathedral City Senior Center has been serving the City for more than 20 years and is located at 68-727 E. Palm Canyon Drive. It is a private, non-profit organization, which is partially funded by the City of Cathedral City, and is open Monday through Friday, with special events on weekends and evenings. Programs include crafts, bingo, dancing, lectures and a variety of other activities. The center also operates an Outreach Program, which recently acquired a van for transporting seniors to and from the center.

Fire Stations

Cathedral City operates its own fire department and has made a concentrated effort to assure the highest level of fire protection services for the community. The Cathedral City Fire Department is responsible for fire suppression, fire prevention, paramedic services, disaster preparedness, hazardous materials response and code enforcement. It operates three fire stations, including Station No. 411 at 36-913 Date Palm Drive; Station No. 412 at 32-100 Desert Vista Road; and Station No. 413 at 27-610 Landau Boulevard. The Department maintains mutual aid agreements with neighboring communities for additional fire support. Please refer to the Fire and Police Protection Element for more information about the City's fire services and facilities.

Police Department

The Cathedral City Police Department is located within the City Hall Building at 68-700 Avenida Lalo Guerrero. The Department also operates three satellite offices, known as "Community Police Service Offices," at the following locations: 1) 68-100 Ramon Road, 2) 34-481 Date Palm Drive, and 3) 69-038 East Palm Canyon Drive. The Department is staffed by approximately 55 sworn officers, 6 reserve officers, and 29 support and administrative personnel. Additional support is provided by the Citizens on Patrol program, which currently enrolls

approximately 50 volunteers. The Police Department implements a wide range of community programs, including Neighborhood Watch, D.A.R.E., Racing for Kids, and the Police Explorers Program.

Schools

The Palm Springs Unified School District (PSUSD) provides public education services and facilities to the City of Cathedral City. Eight schools are located within the planning area, including the following: Agua Caliente Elementary, Cathedral City Elementary, Landau Elementary, Sunny Sands Elementary, Nellie N. Coffman Middle, James Workman Middle, Cathedral City High, and Mt. San Jacinto Continuation High. Private educational facilities and services are provided by the Calvary Bible Christian School and First School of the Desert in Cathedral City, and other private schools in the Coachella Valley.

Three colleges and universities offer a wide range of certificate, degree and vocational programs to residents of the Coachella Valley. The Coachella Valley Campus of Chapman University is located on Cook Street in the City of Palm Desert. In 2001, College of the Desert (COD) enrolls approximately 8,600 students, and the Coachella Valley Campus of California State University-San Bernardino (CSUSB), which enrolls approximately 800 students. The new CSUSB campus at Cook Street and Frank Sinatra Drive in Palm Desert will serve thousands of students. Educational facilities and services are discussed further in the Schools and Libraries Element.

Cathedral City Public Library

The Cathedral City Public Library is located at 33-520 Date Palm Drive and is a branch of the Riverside County Library System. The 20,000 square foot facility opened in 1996 and includes approximately 70,000 volumes. It offers a full range of community services, including computer workshops, literacy programs, youth activities, and an HIV/AIDS information center. Regional library facilities include the College of the Desert Library in Palm Desert, the medical library at Eisenhower Medical Center in Rancho Mirage, and other branches of the Riverside County Library System. Please refer to the Schools and Libraries Element for more information about these facilities.

Post Offices

A new U.S. Post Office opened in Cathedral City in January 2000. The Post Office is a full-service facility located at 33-940 Date Palm Drive, at the intersection of Date Palm Drive and Dave Kelley Road. It provides all the basic postal services offered in most other facilities, including post office boxes, voter registration forms, mail boxes, shipping services and postage stamp sales.

Utility Infrastructure

Utility buildings and facilities, including electrical substations and switching facilities and well sites, can generate noise and also detract from the scenic value of an area. Landscaping and architectural elements can be incorporated into the design of these structures to minimize their visual and noise impacts, screen them from public view, and assure their compatibility with the surrounding built and natural environment. Effective design elements include decorative block walls, vegetative buffers, and the use of locally compatible architectural style and color. Some utility transmission lines can be undergrounded to shield them from view.

The primary utility companies serving the City of Cathedral City are the Coachella Valley Water District, Desert Water Agency (DWA), Southern California Edison (SCE), Verizon, Time Warner, and Southern California Gas Company. Major utility buildings and facilities in the City include a Verizon telephone sub-switching unit on the east side of Date Palm Drive, south of McCallum Way, and DWA sewage pumping plants on Date Palm Drive and Cathedral Canyon. SCE has three substations within the City limits, and one immediately outside the City limits which may serve Cathedral City residents.

Drainage Facilities

The City's primary drainage facility is the Whitewater River Stormwater Channel, which extends from Vista Chino, southeast to East Palm Canyon Drive. Additional capital projects, such as levees, channels and detention/retention basins have been constructed within the City to manage local and regional drainage, particularly in the vicinity of the mountain cove areas of the City. The planned Mid-Valley Stormwater Channel will be constructed immediately east of the City limits and south of the Union Pacific Railroad lines.

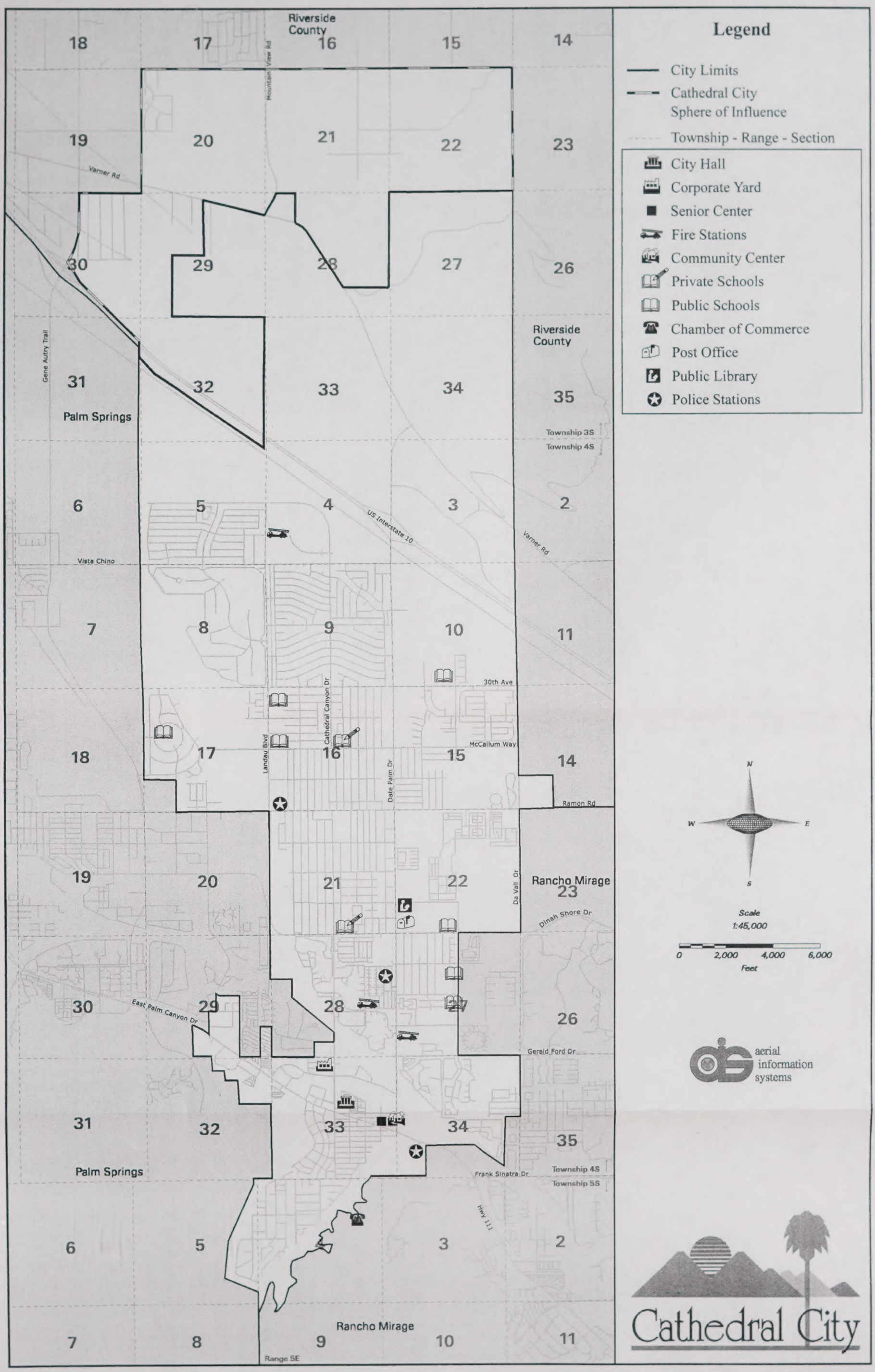
Drainage is typically divided into two categories, local and regional drainage, which are ultimately interrelated. Local drainage refers to limited drainage areas and the generation of runoff associated with urban development. Regional drainage consists of high-volume runoff and facilities capturing and conveying runoff from a larger geographic area. There is a mix of responsibilities among the City, Riverside County Flood Control District, the Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers, and the Coachella Valley Water District regarding the ownership and management of local and regional drainage facilities. These agencies maintain close cooperation and coordination with one another regarding flood control planning and the management of drainage facilities in the community. Please refer to the Flooding and Hydrology Element for more information about local and regional drainage.

Critical Structures

The term "critical structure" refers to any building or facility that provides important and/or essential emergency services following a major disruptive event, such as an earthquake, flood or fire. Critical structures include fire and police stations, hospitals, major airports and roadways, and primary communications facilities.

They may also include other civic structures, as well as school facilities. These structures should be located, to the greatest extent practical, in areas that are the least susceptible to impacts from seismic activity, flooding and other hazardous occurrences. Specifically, they should not be located within or near the 100-year floodplain or a fault zone.

Given the City's proximity to the Whitewater River, and the San Andreas and other fault zones, special considerations should be made in the construction of critical structures. In particular, the City and other responsible agencies should assure that thorough engineering analyses are performed, to the extent necessary, prior to construction of future critical facilities. Building design should include allowances for the offset of building foundations resulting from surface displacements. These and other safety issues are addressed in more detail in the Geotechnical, Flooding and Hydrology, and Emergency Preparedness Elements of the General Plan.



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General Plan
Public Buildings & Facilities

Exhibit
VI-2

FUTURE DIRECTIONS

The continued funding of public services and facilities is crucial to meeting essential needs of the community, and the construction and/or expansion of new facilities will be necessary as the City continues to grow. Until December 1999, the City's Community Services District (CSD) provided a steady revenue stream to fund law enforcement, parks and recreation, street lighting and other public services and facilities. In December 1999, the residents of Cathedral City voted to terminate the CSD. With the loss of CSD income, the City will have to pursue other funding opportunities, such as state and federal grants, General Fund revenues, and the expanded use of volunteers, to meet increasing demands for public services.

Each year, local government agencies (including cities, counties, school districts and special districts) planning the construction of capital facilities must submit to the planning agency a list of proposed projects which they would like implemented. The City's Capital Improvement Program (CIP) identifies existing and proposed projects that require on-going and forward-looking governmental funding, such as traffic signals, street widenings and repavings, parks and recreation facilities, and public parking lots. It is essential that the City carefully review and adjust its CIP, as necessary, to assure consistency with General Plan goals and policies and to respond to the changing needs of the community.

GOALS, POLICIES AND PROGRAMS

Goal 1

Dependable, cost-effective, and conveniently located public buildings, services and facilities, which meet the current and future needs of the City residents.

Goal 2

Public buildings and facilities with optimal functionality, while being compatible with surrounding land uses and aesthetically integrated into the City's built and natural environments.

Policy 1
The Land Use Element shall assure the long-term availability of sites for future public and quasi-public buildings, infrastructure, and other facilities.

Program 1.A
The City shall periodically review its official Land Use Map and development patterns to assure the availability of adequate sites for future public and quasi-public buildings, infrastructure, and other facilities. The City shall confer and coordinate with utilities and other public and quasi-public agencies regarding their long-term needs.
Responsible Agency: Planning Department, Public Works Department, CVWD, DWA, Riverside County Flood Control, SCE, SCG, Verizon, Time Warner
Schedule: 2003-2004; every five years

Policy 2
Continue to identify and evaluate viable, long-term funding mechanisms that provide for the construction, maintenance and operation of existing and future public buildings and facilities.

Policy 3
The City shall routinely evaluate and update, as appropriate, its Capital Improvement Program.

Program 3.A
Establish and implement a Capital Improvement Program review and update schedule, which includes annual reviews, analysis and comprehensive revisions every five years.
Responsible Agency: City Manager, City Council, All City Departments
Schedule: Annual review; comprehensive revision every five years

Policy 4
Coordinate with public utility providers and other public/quasi-public agencies to assure that utility buildings and facilities are compatible with the surrounding landscape.

Program 4.A
The City shall establish and maintain close working relationships with utility purveyors and other public and quasi-public agencies serving the City to assure the least intrusive integration of related buildings and facilities into the community.
Responsible Agency: Planning Department, Public Works Department, CVWD, DWA, SCE, SCG, Verizon, Time Warner
Schedule: Immediate; Continuous

Program 4.B
All new maintenance and utility facilities (and their signage) shall be integrated into the surrounding environment using landscape treatments, architectural elements, and/or other appropriate design mechanisms. Whether as a regulatory or advisory function, design plans shall be reviewed by the Planning Department.
Responsible Agency: Planning Department, Public Works Department, CVWD, DWA, Riverside County Flood Control, SCE, SCG, Verizon, Time Warner
Schedule: Immediate; Continuous

Policy 5
All public buildings and facilities shall comply with the same development standards as private development.

Policy 6
To the greatest extent practical, the City shall encourage the undergrounding of electrical power lines

Program 6.A
Consult and coordinate with Southern California Edison regarding the costs, methods, potential barriers to, and feasibility of undergrounding electrical power lines.
Responsible Agency: Planning Department, Southern California Edison
Schedule: Immediate; Continuous

Policy 7
Critical structures and facilities (including civic administrative center, hospitals, fire stations, police stations, schools and major communications facilities) shall be restricted from geologically and hydrologically hazardous areas, to the greatest extent practical.

Program 7.A
The City shall review all development proposals for new critical structures to assure they demonstrate safety in terms of geologic, hydrologic and other engineering conditions of the site.
Responsible Agency: Planning Department, Public Works Department
Schedule: Immediate; Continuous

Policy 8
Investigate the feasibility of expanding the City's existing corporate yard to accommodate larger office space, parking lots and maintenance facilities.

Policy 9
Investigate the feasibility of constructing a new community center in the northern portion of the City, including potential sites and funding opportunities.

ARTS AND CULTURE ELEMENT

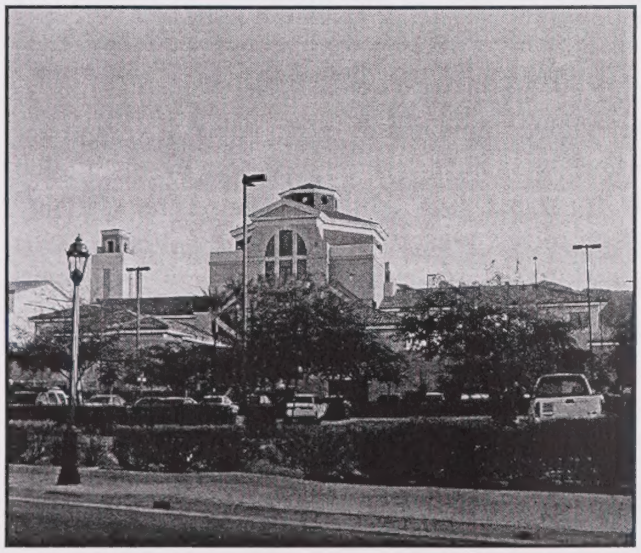
PURPOSE

The City's aesthetic values are reflected in, and provide the basis for, cultural identification throughout the community's planning efforts. The Arts and Culture Element presents policies and programs that maximize the role the City can play in encouraging and supporting the cultural development of the community. In addition to the direct support given to City-sponsored activities and facilities, the City can and should play an important role in helping to encourage and enhance the activities of public and private nonprofit enterprises supporting the arts. The purpose and intent of this involvement is to further a better understanding, appreciation and enjoyment of the cultural environment in Cathedral City.

BACKGROUND

Elements directly related to arts and culture include the Community Image and Urban Design Element, the Archaeological and Historical Resources Element, the Open Space and Conservation Element and the Schools and Libraries Element. The Parks and Recreation Element plays an essential role in providing facilities and coordinated activities for sport and recreation. In addition, the Biological Resources Element recognizes the community's vested interest in and dedication to the preservation of wildlife and habitat, and as the reason many have chosen to live in the city.

South View of Cathedral City Civic Center



The cultural and artistic tradition of the City of Cathedral City and the Coachella Valley have a long and interesting history of human culture to draw upon, extending from Cahuilla Indian rock art, pottery and basketry, to the modern city with state-of-the-art technologies and communication systems. Those living in the city today comprise a wide range of artistic appreciation and cultural diversity, with common roots and shared values. Our awareness of this cultural tradition, as well as natural environment, is essential to forming the cultural sensitivity of our community. This is the basis of the City's culture and art.

In 1992, the city began the implementation of a Downtown Revitalization Strategy. A new Civic Center and street improvements along the East Palm Canyon Drive corridor were completed in 1998. The first of a series of Downtown projects that have been completed include the City Hall and Police Department, the Desert IMAX Theater, the Fountain of Life, the Mary Pickford Theater and Experience, and various retail shops and restaurants.

Future Downtown projects will include more restaurants, shops, plazas and other public gathering places, all of which will set the stage for increased opportunities for Art in Public Places and cultural events

Within the City, the Downtown Revitalization Strategy includes the development of an Arts Program, which focuses on providing a welcoming and stimulating environment for practicing artists to live, work and present their art to the community. A concerted effort is in place to make art a more integral part of citizens' lives by encouraging the expansion of the arts in the school system, establishing new educational activities, inviting broader participation of students and designers in local public arts opportunities and creating venues for local artists.

The Mary Pickford Theatre

An Arts in Public Places program has been established and fees are collected to support the projects being developed. These and other arts and culture issues are discussed below.

Unlike many areas of community planning, which are relatively distinct in their application to the city limits, the arts and culture focus is better viewed on a valley-wide basis. Residents of Cathedral City are able to enjoy cultural resources that have been supported by all Valley residents, including such facilities as the Palm Springs Desert Museum, the Agua Caliente Museum, the McCallum Theater, and the Children's Discovery Museum. The Living Desert Preserve also provides important cultural opportunities for residents and visitors of all communities in the Coachella Valley.

Cultural Venues

IMAX Theater

The Desert IMAX Theater is in the core of the city's newly developed Downtown. The six-story, 279-seat 2D/3D theatre projects large format movies onto the largest screen in the desert communities. The theater also offers educational film experiences relevant to specific curricula followed by local schools.

Teachers' supplements and resource guides incorporate subjects such as the sciences, computer studies, environmental studies, geography, social studies, astronomy, history, creative arts, and technology.

Imax Theater on East Palm Canyon Drive

The Mary Pickford Theatre and Experience (Museum) opened in spring of 2001. The theatre is a 14-screen, first-run movie house with state-of-the-art auditoriums, digital sound and stadium seating. One of the auditoriums is equipped with a stage and movable screen to handle live performances and special showings. The museum displays items from the estate of silver screen star Mary Pickford, using objects, video, lighting and storyboards to illustrate the actress' life, historical setting, and influence on Hollywood. The museum has been made possible by the generosity of Buddy and Beverly Rogers.

Palm Springs Desert Museum

The Palm Springs Desert Museum is a fine arts and natural history museum located in Palm Springs. In addition to indoor exhibition space and instruction facilities, the Desert Museum also has an outstanding sculpture garden. This facility also houses the Annenberg Theater, which is the site of a wide array of cultural programs ranging from classical and popular music to theater and education programs. The natural history programs include dioramas of desert and mountain habitats and wildlife, and in-house education programs on the natural world. The museum is also an important repository for cultural artifacts of the Agua Caliente Indians.

Agua Caliente Museum

The Agua Caliente Museum, currently (2001) located in the Village Green Heritage Center in Palm Springs, is planning the development of a tribal museum in Palm Springs. The Agua Caliente Tribe has designated a twenty-acre site in the Indian Canyons Heritage Preserve to be home for a museum complex that will include exhibits, classrooms, a library, auditorium, restaurant, botanical garden, Cahuilla village recreation, and hiking trails. The museum will be an important catalyst for the advancement of the rich Cahuilla cultural heritage.

McCallum Theater and The Bob Hope Cultural Center

The McCallum Theater at the Bob Hope Cultural Center is a 1,200-seat performance facility located on the campus of the College of the Desert. A wide variety of cultural events are staged at this facility and range from accomplished local theater and concert performances to similar activity by world renowned performers and orchestras. A wide variety of popular music and theater are performed at this facility, which is also the venue for the annual Diana Hodges International Piano Competition

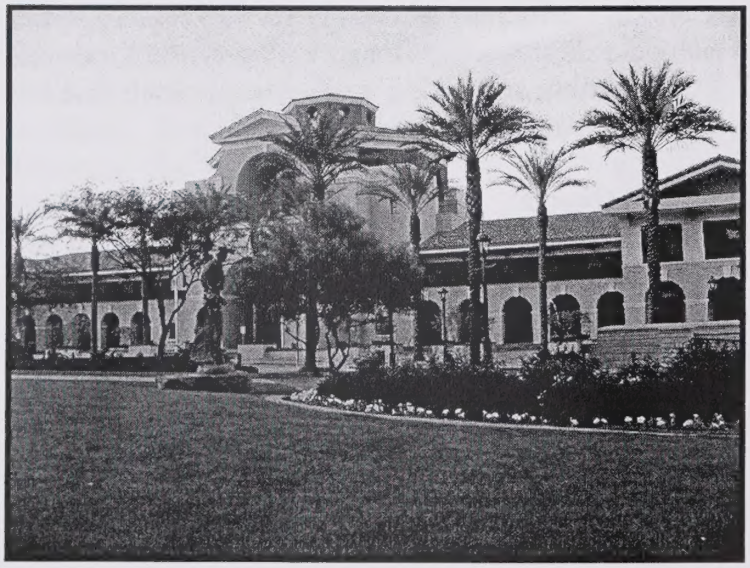
The Living Desert
The Living Desert is a non-profit education and conservation center located in Palm Desert. It includes a 1,200-acre zoological park representing over 150 species including coyotes, bighorn sheep, oryx, zebras, desert tortoises, lizards, cheetahs and meerkats. The botanical gardens represent 10 different desert ecosystems. The center also features wilderness hiking trails, Native American exhibits and special events and programs throughout the year.

Children's Discovery Museum
The Children's Discovery Museum of the Desert is dedicated to the cultural and artistic development of children. Located in Rancho Mirage on Gerald Ford Drive, it is a hands-on museum that serves all ages of children by encouraging the exploration of the natural environment and the community. The museum also houses a museum store, performing arts center, outdoor amphitheater, community gardens and covered picnic area.

Palm Springs Air Museum
The Palm Springs Air Museum is dedicated to the preservation, presentation and interpretation of the Air Power of World War II, its relevance and significance upon the course of history, and its impact on contemporary life. The museum has one of the world's largest collections of flying World War II warplanes. Exhibits include combat photography, original artworks, artifacts, uniforms, and video documentaries. Regularly featured are flight demonstrations of the museum's collection and visiting aircraft, both historic and contemporary.

Festivals

Festival of Festivals
The City of Cathedral City serves as the host city and provides the central valley-wide box office for the Coachella Valley Festival of Festivals, a new film festival. It features the best films from festivals throughout the world. The Mary Pickford Theatre is used for the opening and closing nights of the film festival, with other valley theaters and venues participating throughout the event.



The Town Square at Civic Center

The Kaleidoscope Festival
The Kaleidoscope Festival celebrates the diverse culture that is Cathedral City. The event, sponsored by the Cathedral City Chamber of Commerce to promote a sense of community, features international arts and crafts vendors, music and entertainment from local schools and performers. It is held annually in Town Square.

OPPORTUNITIES FOR CULTURAL AND ARTISTIC EXPRESSIONS AND APPRECIATION

Art in Public Places

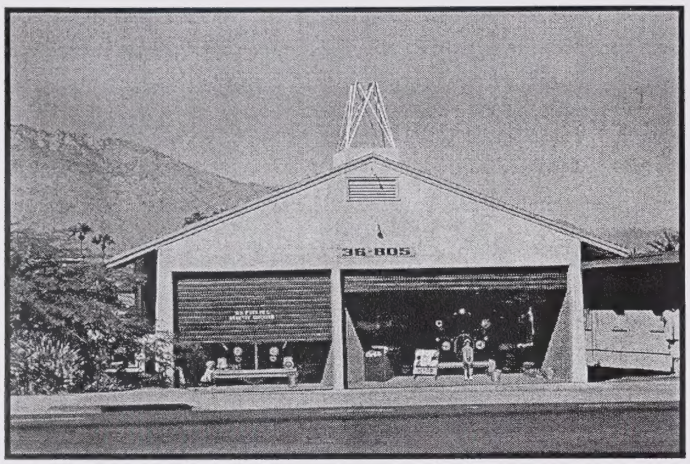
The placement of art in public places is another significant opportunity to express and reinforce the cultural cohesion of the community. Consistent with the principle of a low density resort residential community that values its mountains and wild places, public art can integrate native landscaping along major roadways to reflect the surrounding Santa Rosas and desert washes. It can include the attentive design and placement of public buildings, as well as placement of manmade monumental sculpture on public lands, or within the rights-of-way of major roadways.

The Art in Public Places Program has been created in order to promote the general welfare of the city through balancing the community's physical growth and revitalization of its cultural and artistic resources. The city's Art in Public Places ordinance has established a Public Art or In Lieu Payment requirement collected at the time building permits are issued. New projects for this program are developed on an ongoing basis.

Fountain of Life
The interactive Fountain of Life is one of the City's initial responses to the concept of art in public places. Located in the Civic Center Plaza, it is designed to encourage children and adults to walk and play in the fountain, which has a soft surface made from recycled tires, a gift of the Agua Caliente Band of Mission Indians. Reflecting the nature and history of the desert, the fountain features stone columns surrounded by sculptures of desert wildlife.

The Fountain of Life located in front of the Town Square

Sites including Town Square, the City Library, City Hall, The Mary Pickford Theatre, and the Desert IMAX Theater are all suitable locations for public art. A bronze sculpture, *Hollywood Hero*, donated by actor George Montgomery, has been installed in Town Square, demonstrating the beauty of such public art. Murals offer various opportunities to convert blank walls into interesting canvases. Also appropriate are the Fountain of Life, and City-owned parks and open space areas, which offer important opportunities for local artists to display or perform their work and hold workshops and classes.



The Fire House has a painted mural on the back of the building resembling an open bay garage for the fire engines

Cathedral City Public Arts Commission

The Cathedral City Public Arts Commission (CCPAC) has been established to help the community attain the benefits of the arts by making them more accessible, establishing specific programs, securing funding and creating a clear policy and procedural guidelines. It develops and presents concepts to the City Council and organizes and directs subcommittees to take advantage of the special talents of individuals within the community. Comprised of seven commissioners, its goal is to enhance the image of Cathedral City as being a magnet for the arts and artists, by engaging in highly visible projects and programs which are designed for citizen participation. Establishing temporary exhibit spaces for local artists, organizing performance arts events, and joining with other Coachella Valley cultural leaders to discuss issues of mutual concern and interest are also some of the core objectives of the Commission.

The Cathedral City Public Arts Commission has adopted an Arts Plan to carry out these and other goals and concepts. This document sets forth Cathedral City's vision of an arts program and outlines strategies for implementing it.

Land Use Planning as a Strategy for Cultural Resource Preservation

Cathedral City's low-density resort residential lifestyle and a close association with wildlife and the environment have been consistently recognized as integral parts of the community's culture and traditions. The development of the General Plan Land Use map has been based on several central values embraced by the community. These include the desire to preserve open spaces to assure the long-term enjoyment of wildlands and wildlife, and to preserve and protect the cultural heritage of local Native Americans. The Land Use Element and various elements of the General Plan take these and other special concerns into account and will play an active role in preserving these community assets for future generations.

FUTURE DIRECTIONS

Part of the fabric of a community is woven by the resources for cultural enrichment that are offered to its citizens. The goals and policies of the Arts and Culture Element are intended to help foster a civic environment where artistic expression and cultural diversity can flourish. Like the element devoted to Economic Development, the relation of arts and culture to the physical environment is indirect, but both have decided influences on the quality of life offered in Cathedral City.

There are several means available to implement the Arts and Culture Element, including the integration of public art into main city entries and focal points. The City may also encourage developers to include sculpture and cultural icons into major project corners, entries and parkway treatments.

GOALS, POLICIES, AND PROGRAMS

Goal 1

Develop, maintain, nurture and promote cultural and artistic awareness, expression and diversity as a way to enhance the quality of life for residents and visitors.

Goal 2

Provide an improved sense of community through the integration of the arts into the civic identity, through cultural programs, facilities and events, and all aspects of the arts.

Policy 1
Recognize and promote the arts, artists, performing arts, and cultural organizations as valuable resources of our community for economic vitality and tourism.

Program 1.A
The City shall proactively sponsor and support performing arts, musical events, exhibitions and festivals in the venues provided by theatres, plazas, squares, parks and other areas available for such events within the city.
Responsible Agencies: Public Arts Commission; Parks and Recreation Department; Economic Development Department; Technology Department; City Council
Schedule: Continuous

Policy 2
Through mutual programs and public-private partnerships, encourage corporate, business and foundation support of artistic and cultural activities.

Program 3
Create a series of public art programs throughout the community.

Program 3.A
Encourage cooperation between the schools and community cultural and arts organizations to increase exposure to, appreciation of, and participation in, our cultural activities and heritage.
Responsible Agencies: Public Arts Commission; Parks and Recreation Department; PSUSD
Schedule: Continuous

Program 3.B
The City shall encourage the development of an arts appreciation curriculum, designed to provide positive reinforcement to each student, which would offer elementary and secondary school students the opportunity to become knowledgeable and skilled in the arts. This could include after-school and summer programs dealing with the arts, which may utilize city property, including walls for murals.
Responsible Agencies: Public Arts Commission; Planning Department; Parks and Recreation Department; PSUSD; Technology Department, Developers
Schedule: Continuous

Program 3.C
When reviewing development proposals, the City shall consider the inclusion of venues for public art, as well as venues for music and the performing arts. As their Public Art or In Lieu Payment requirement, developers may choose to designate their contribution to this program.
Responsible Agencies: Public Arts Commission; Planning Department
Schedule: Continuous

Policy 4
Recognize that by their nature, the arts are developmental, experimental and controversial, and take a leadership role in creating an atmosphere in which creative expression can flourish.

Policy 5
The Arts Commission should consider the City's varied and diverse cultural heritage when planning programs and projects for the City Council's consideration.